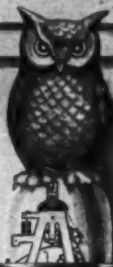


THE TICKER AND INVESTMENT DIGEST
THE MAGAZINE
OF
WALL STREET



The Intermediate Swings

How to Profit by Them

By Rollo Tape

Forecasting Trade Conditions

By Roger W. Babson

**The Fluctuation Value of Active
Stocks**

By G. C. Selden

**A New Link of the Pan-American
Railroad**

Practical Stock Market Lessons

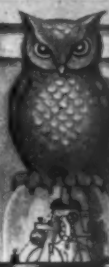
By Dr. A. L. Bower

The Copper Situation

The Investment Digest

The Bargain Indicator

The Market Outlook



MONTHLY
25c.

JUNE, 1911

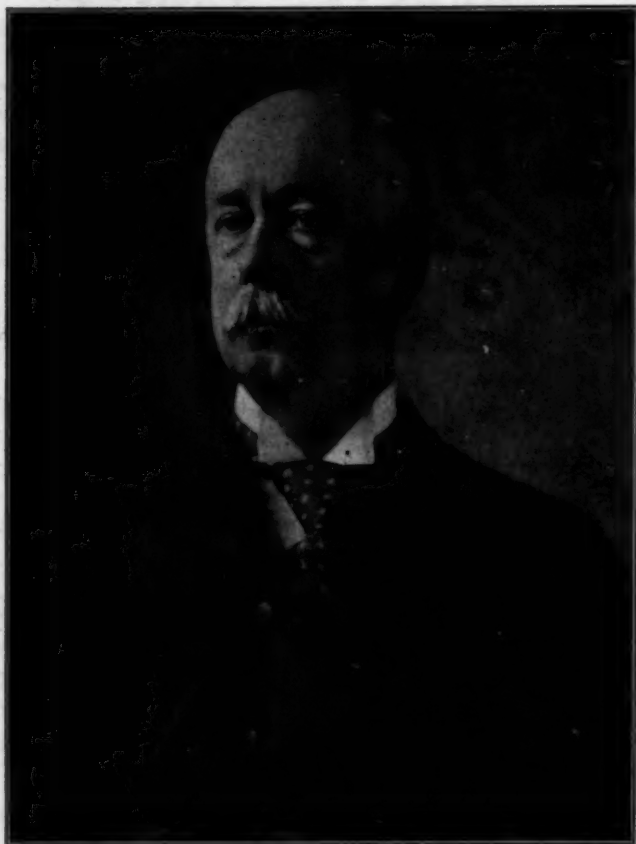
BY THE YEAR
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No. 2



C. S. MELLEN

President New York, New Haven & Hartford R. R. Co.

THE TICKER INVESTMENT DIGEST

Investment: The placing of capital in a more or less permanent way, mainly for the income to be derived therefrom. **Speculation:** Operations wherein intelligent foresight is employed for the purpose of deriving a profit from price changes.

Vol. 8

JUNE, 1911

No. 2

Studies in Stock Speculation

By ROLLO TAPE

Author of "Studies in Tape Reading"

XIX—Playing Panics—Continued.

IF the first ten stocks in The Bargain Indicator had been selected and 100 shares of each bought, the cost would have been as follows:

100 Alton	\$1,500
100 Wab. pfd.	1,600
100 Col. & So.	1,800
100 St. L. Swn. pfd.	3,000
100 Denver	1,900
100 K. T.	2,400
100 K. C. So.	2,300
100 St. L. Swn.	1,500
100 "Soo" com.	7,400
100 Iowa pfd.	3,500
Total	\$26,900

The table shows that these stocks advanced an average of 181 per cent. No other ten stocks on the list equalled this record.

Had the buyer realized only half of this advance his profit would have been \$24,344.50.

If it were possible for him to have obtained the highest prices for these stocks during the subsequent boom, his original investment of \$26,900 would have grown to \$75,589!

This shows what splendid opportunities develop in a panic and why the panic player should prepare himself years in advance, allowing nothing to interfere with his plans.

Supposing the time occupied in making ready, going through the panic and liquidating does occupy three years and your profit is only half what might have been made in the 1907 panic, say 90 per cent.; this amounts to 30 per cent. *per annum* for the three-year period. Can you put money into any other proposition that will pay so well?

Note the many other advantages:

- (1) Your property *always* consists of cash in bank or securities in safe deposit.
- (2) It is within your absolute and individual control at all times.

(3) You can dispose of all or any part of your securities on any Stock Exchange day and get a check for the proceeds the next day, except Saturdays. This check you can have certified at once if you are in the same city as your broker. If not, your bank will handle the transaction.

(4) Your securities can be used as collateral for a loan in case you require funds before you dispose of your holdings.

(5) You are free to pursue your regular business or profession.

It often happens that a low-priced stock bought in a panic will later develop into a dividend payer. In such a case the investor has the option of holding the stock as a permanent investment.

In the case of Chicago & Alton the stock which was figured at 15 in the table, but which actually sold at $8\frac{1}{8}$ after the panic, began paying dividends the very next year, when it disbursed 1%. The following year, 1909, it paid 4%; in 1910, 2%. Total dividends 7%, or nearly 50% on the cost of 15, and almost the entire cost if bought around the lowest price.

Colorado & Southern common is another case. The price, 18, shown in the

table, was one point from the low record. The stock was earning 5% at the time. In 1908, 1909 and 1910 dividends at the rate of 2% were paid. Current earnings are at the rate of over 6%, and increased dividends are probable. The Burlington road controls Colorado & Southern, and Burlington methods mean sound railroading and regular dividends. When Colorado & Southern pays 5% it will net the buyer at 18, about 30% per annum on his investment. This may take a few years, but it would be worth waiting for, as it would establish that particular \$1,800 investment on a permanent liberal net return basis.

St. Louis Southwestern pfd. was earning 8% when it sold at 25 in the panic. Dividends were inaugurated in 1909, and in 1910 it paid 5%, equal to 20% on a cost price of 25.

Chesapeake & Ohio sold at $23\frac{1}{4}$ in 1907 and is now paying 5% per annum.

It will be seen from the above that the ranks of dividend payers are recruited from the low-priced issues—the coming roads. Not only the greatest profits but very often the largest investment yield can be obtained by purchasing the best of these low-priced issues at panic prices.

XX—Trading On the Intermediate Swings

METHOD No. 2, briefly described as "Trading on the Twenty-Point Swings," is an advantageous one for those who have not the patience to wait for panics, or who prefer to take a more active interest in the market.

Examine any chart or other record of the whole market or some particular stock, and it will show numerous important swings each year. The high-priced speculative issues like Reading & Union have in the last year or two worked within a radius of forty to seventy points respectively, these large moves being composed of many smaller swings which furnished good speculative opportunities.

During 1910, which was an active year, the monthly swings in Reading were as follows:

	High.	Low.	Fluctuation.
January.....	171½	154	17½
February.....	172¼	155¼	17
March.....	171½	162½	8¾
April.....	168¾	156¾	12½
May.....	166¾	153¼	13½
June.....	158¾	140¾	17¾
July.....	147½	130¾	16¾
August.....	147½	132¾	14¾
September....	147¾	136¾	11¼
October.....	156¾	146	10¾
November....	156	147½	8¾
December....	151¾	142½	9¾

The table shows a decline from the high point of the year, 172¼ to 130¾—41¾ points—and a recovery to 156¾—25¾ points. June and July were very active months.

To obtain the greatest benefit from

these swings the trader should of course aim to get long or short at the turning point, and hold on for a big profit—to get in at ebb tide and sell out at flood. This, we all realize, is a very difficult thing to accomplish, but there are ways in which the judgment can be reinforced.

First of all we must know the trend. This subject has been fully covered in previous chapters. Having determined that the trend is down, we must look for an advantageous point at which to sell; if the trend is up we must look for a good buying point.

The figure charts, particularly those covering only 5-point movements, shown in Chapter VIII, and IX., are probably the best indicators of the time to act. The 1 and 3 point figure charts may be of service in picking the buying or selling point closer, but in working on such big swings one cannot afford to take too microscopic a view.

My idea would be to endeavor to pick the top sufficiently close to warrant the use of a 3 point stop order, this to apply when trading on margin either on the long or short side. I should not attempt to operate without a stop; for taking a big loss means parting with your money, crippling future operations and perhaps total discouragement. Even if you are compelled to take two or three losses at times, remember you are playing for big profits and that losses are "operating expenses."

Stop orders can be moved up to prevent the conversion of profits into losses. This may be done on a mechanical basis or by the use of judgment. The best places for stops are just away from the new resistance points which may be formed.

When the time comes for taking profits, instead of closing out arbitrarily, the stop can be moved to within three points of the extreme high or low. This leaves the way open for further profits without jeopardizing all those which have accrued.

It is well to remember, in this connection, that no matter how big a move is in progress, reactions are apt to be frequent. The mere fact that a stock has declined 20 points is no reason why it should run down another 10 points.

The short interest may be unwieldy. This of itself would be apt to bring about a rally. Besides, an important decline produces an entirely new situation in a stock: people who would not touch it at 150 are ready buyers at 130, particularly if it is an investment stock, paying regular dividends and earning two or three times requirements.

It has been claimed that Reading has a way of "running" 9 or 10 points in a certain direction, then hesitating and reacting before completing its big swings, which usually average around 20 points. Whether this is true often enough to consider, is not easy to say owing to the difficulty in deciding just when a move starts and finishes.

However, the trader who makes four trades a year, risking three points each time and winning 20 points or nearly that once out of the four times, will come out with 10 points profit a year. On a \$2,000 capital this would give him about 50% profit, assuming he traded in 100 share lots on a 10-point margin.

If he secured one 20-point and one 10-point profit against two 3-point losses it would work out like this:

1st profit.....	\$2,000
2d "	1,000
	<hr/>
	\$3,000
Two losses.....	\$600
Com. on 4 trades.....	100
Tax	8
Interest	?
	<hr/>
Net profit	\$2,292

equal to about 114% per annum.

The active high priced speculative issues are best for this purpose, particularly Union Pacific and Reading. The majority of stocks being lower priced or less popular among traders are less desirable. If one were obliged to choose a third stock it would be St. Paul. When U. S. Steel works up above par its movements will doubtless place it in the category with the above. Meanwhile its movements are more circumscribed.

Some traders may prefer to use their judgment instead of the charts. In such cases there should be formed some mental basis of action so as not to rely upon random shots, which often pass for

judgment. That is, the trader should decide whether the trend is up or down, then follow some line of reasoning which he has found successful in the past, such as an estimate of the probable length of the swing, the resistance to pressure, turning points based on large volumes, etc.

Anyone who understands Tape Reading as explained in my book on that subject can detect these turning points more accurately and closer to the extremes than by any other method. The reason is, the tape reflects coming stock market changes often before the most influential operators realize or anticipate them.

Judgment trained by long stock market experience is of immense advantage on so called "critical" days, when the future of the whole financial community seems to hang upon the outcome of some important event. Frequently it will be found that hysteria rather than common sense governs public and professional operators and splendid opportunities are afforded for getting in right.

Perhaps the safest and most conservative way of operating on this plan is to work only on the long side during an up trend, buying only after a decline of say 10 points, paying for your stocks outright, and being prepared to buy more every 10 points down as far as it goes. In this way the greater the decline the better you like it, provided all your purchases are on a cash basis and you don't worry about margin calls. Enough cash should be provided to see the stock down to panic levels. This plan does away with stop orders and does not provide for taking losses because operations are confined to stocks of unquestioned intrinsic value, paying dividends and earning such large percentages that

no reduction is within reason. In this class there appears to be nothing more suitable than Reading and Union Pacific.

METHOD NUMBER 3: Trading on the 5 and 10-point swings. For this we would suggest using the 1, 3 and 5-point figure chart and a trend chart such as the Dow-Jones averages in figures.

Commitments should be protected by a 2-point stop, which can remain the same until the trade is closed out, or be moved closer as the price of the stock moves in a favorable direction. A very good plan of this kind is followed by a trader of my acquaintance whose original stop is $2\frac{1}{4}$ points; when the stock goes 2 points in his favor his broker is instructed to move the stop to $1\frac{1}{4}$ points from the original buying or selling price. If another 2-point advantage is gained the stop is moved up (or down) another point so that the risk is limited to $\frac{1}{4}$ point. When $5\frac{1}{4}$ points profit are secured he closes out the trade.

This method limits the risk, including commission, to \$250 on 100 shares and makes a \$500 net profit when it goes right. If any of the adjusted stops are caught the loss is \$150 or \$50, as the case may be, commissions added.

It is important to recognize the point here implied: Profits must average more than losses. This operator could have three losses of \$250, \$150 and \$50—a total of \$450, and one 5-point profit would put him on the right side.

In choosing the price at which to enter the market for a 5-point swing, the operator who does not wish to rely upon his judgment may employ the "Stop Order Method" principle described in a previous chapter. This will often give him the cue before the full figure chart.

(Continued in the July Issue.)



A New Link of the Pan-American R. R.

An Important Connection Nearing Completion in Guatemala

THE dream of one generation becomes a reality for the next.

When James G. Blaine talked of a Pan-American railroad, which should unite New York and Puget Sound with Buenos Aires and Santiago, his words were little more than the prophetic vision of a far-seeing mind. Today his dream

The Guatemala Central Railroad (including the Occidental, in which it owns a controlling interest), has already pushed its rails within a short distance of the same point and the connecting link is under construction. This will take the traveler all-rail to the city of Guatemala and its Pacific port, San José. That



BUENA VISTA STATION, GUATEMALA CENTRAL R. R.

is approaching the stage of a sober and practical reality.

On June 30, 1908, the last spike was driven in the section of the Pan-American which connects the cities of Mexico and Vera Cruz with the northern bank of the Rio Suchiate, on the Guatemalan frontier, at the extreme southern point of Mexico, and only a few miles from the Pacific Ocean.

the gaps will soon be filled to the southward as far as Panama cannot be doubted. The necessary links are already projected and under consideration.

In the meantime another line, the Guatemala Railway, was at length completed in 1908 from Guatemala City to the Atlantic, making a short and direct route from ocean to ocean, although it runs through a mountainous country

and has steep grades. By this road and steamer across the Gulf, Guatemala is only three or four days from New Orleans and five or six from New York.

If we in the United States are indifferent to this enterprise, the Central Americans are not. The following rosy forecast is clipped from a Guatemalan publication. The author had a few little difficulties with English, but his heart is evidently in the right place:

"Three and a half or four days by rail to Mexico; seven to New York or Washington. Distances almost disappear!

implant its ideals in the Capitol of Washington, the one influence counter-balancing the other, and producing from this commingling a true and genuine *Pan-Americanism*. On leaving this capital the traveler will be able to journey in *Pullman Car* to the north or to the south; to New York in seven days, or to Buenos Aires in fourteen."

The average American citizen probably knows less about Guatemala, now only four to six days away, than he does about Thibet. Our lofty ignorance about our Southern neighbors is really absurd.



THE NATIONAL THEATRE, GUATEMALA CITY.

"And when, at the end of a few years, Yankee energy and capital finish this colossal work of the Pan-American Railway, spanning the 7,000 miles that are calculated from New York to Buenos Aires—the the people of one part of the Continent will pass to and fro to the other part, and their route will be through Central America and Guatemala; then the practical and progressive spirit of the country of Monroe will spread to the pampas of Argentina, and in its turn the noble and inspired spirit of the nations created by Bolivar and San Martin will

Guatemala is about the size of the State of New York, and is far the most important of the Central American States. In fact its population is about equal to that of all the other States combined. It is a mountainous country and has numerous large rivers and lakes. Altitude varies from nothing at the coasts to over 10,000 feet above sea level at points in the interior. This gives the country every variety of climate and products. On the lower lands are grown coffee, sugar cane, cocoa, cotton, bananas, rubber, tobacco, etc., while at a higher elevation

flourish apples, strawberries, peaches, wheat and other products of the temperate zone.

The beauty of the scenery is not excelled in any part of North America, and immigrants soon become warmly attached to the country. It is a region of beautiful flowers; 400 different specimens of the orchid alone are said to have been classified. Its virgin forests contain 240 different kinds of timber adapted to the use of the builder or cabinet maker, and its mountains are replete with undeveloped mineral wealth, with numer-

the exports are to Germany—chiefly a superior grade of coffee.

In Guatemala City one finds a high state of civilization—telephones, telegraph, street cars, automobiles, parks, and many beautiful buildings.

The first railroad was opened in 1880, from San José, on the Pacific, to the city of Guatemala, a steady climb of 5,000 feet in 70 miles. The maximum grade is 3.6 per cent. This is now a part of the Guatemala Central R. R. This road and the Occidental, which it controls, hold about 275,000 acres of land in the



TEMPLE OF MINERVA, SCENE OF SCHOLASTIC FESTIVALS, GUATEMALA CITY.

ous mines in operation. Occasional volcanic eruptions on the Pacific side have hindered development.

There are thirteen cities having more than 10,000 inhabitants each. Guatemala, the capital, has about 100,000 people and is 5,000 feet above sea level. The next largest is Totonicapam, with 25,000 inhabitants and over 8,000 feet altitude.

Imports from the United States are nearly equal to those from all other countries combined, but more than half

northern part of the republic, a large part of which is mahogany forest.

The time table of the Central is amusing—4 hours from Guatemala City to Santa Maria, 54 miles distant, and 6 hours and 20 minutes back! A hard climb, evidently.

It looks as though Southern Pacific would be the American road likely to benefit most from this approaching completion of rail connections to Panama. The genius of E. H. Harriman saw a splendid opportunity on the Pacific coast

of Mexico, and the Southern Pacific's Mexican lines are already well along toward the operating stage. This will give a direct line from California to Mexico City. The Kansas City, Mexico & Orient will furnish a direct connection from Topolabampo to Kansas City, crossing the Southern Pacific.

It is clear that our relations with the

countries to the south of us are approaching a new stage. The number of Americans who are yearly finding occupation and prosperity in Mexico and Central America is rapidly increasing and the flow of Yankee capital into those countries will grow greater from year to year. The wide-awake investor will, in future, find many opportunities to the southward.

Surplus Over Dividends

Varying Amounts Earned by Some of the Standard Railway Stocks

PRESIDENT MELLEN, of the New York, New Haven & Hartford system, whose portrait is presented in this issue of THE TICKER, is reported to have made the following statement: "I can say emphatically that, for the twelve months to the end of June 30, next, the revenues of the New Haven system will show within a very small fraction of 8 per cent. on our stock; it may be a small fraction under or a small fraction over this figure. All rumors that any reduction in the New Haven dividend rate is even a possibility are but the vaporings of a disordered mind."

This statement offers considerable food for reflection to the owners of New Haven stock. From 1887 to 1893 that road paid 10 per cent. annually, in 1894 9 per cent., and 8 per cent. since then. In addition to the regular dividends, rights have been issued five times, as follows, the quotations being the high and low prices at which such rights sold:

	High.	Low.
1909.....	8½	5½
1907.....	5	1¾
1905.....	5½	4½
1903.....	1¾	¾
1895.....	29	26¾

Earnings on par for the last five years have been as follows: 1910, 10.3 per cent. on \$105,000,000 capital stock (or

9.5 per cent. on the \$113,000,000 now outstanding); 1909, 7.4 per cent.; 1908, 5.4 per cent.; 1907, 9.2 per cent.; 1906, 12.2 per cent. If, therefore, the stock earns only just its dividend for 1911, a considerable decline will have been shown as compared with most previous years.

There are several things that mitigate the force of this poor showing. One is the large capital expenditure of the New Haven system during the last few years, on which full returns have not yet begun to come in. A heavy outlay of new capital cannot be expected to bring an immediate flow of increased earnings into the treasury. The railroad must look far ahead and must provide for future necessities. All the Eastern roads, and to a less extent other roads also, have been doing that in recent years. It places them under a temporary handicap, but it is necessary in order to provide for economical handling of increased business in the future.

It is interesting to compare the New Haven surplus of 1.5 per cent. for 1910 with that of other important roads:

	Surplus Over Dividends.
Eastern:	
New York Central.....	1.4
Pennsylvania	3.3
Reading	10.1
Lehigh Valley	5.4

	Surplus Over Dividends.
Baltimore & Ohio.....	2.9
Delaware & Hudson.....	3.5
Lackawanna	15.4
Panhandle	1.1
Southern:	
Chesapeake & Ohio.....	5.0
Louisville & Nashville....	10.3
Norfolk & Western.....	6.6
Atlantic Coast Line.....	6.0
Western:	
Canadian Pacific	6.0
Great Northern	1.5
Northern Pacific	2.0
St. Paul	1.0
Union Pacific	9.2
Atchison	2.9
Northwestern	0.7
Illinois Central	0.1
Southern Pacific	7.0
Soo Line	8.7

Here is variation enough, certainly. In the East and South we see at once that Reading, Lackawanna and Louisville made a very strong showing, while New York Central was conspicuously

weak. All the Northwestern roads in the United States, and Illinois Central, earned very small surpluses, while Canadian, Union and Southern Pacific came out strong.

All the Eastern roads that show a small surplus have been laboring with the same difficulty—large capital expenditures with a view to the future—and the same is true of some of the Western roads, but not all. Of course the ideal combination, from the stockholders' point of view, would be assured regularity of earnings, liberal dividends and a large enough surplus to take care of all new construction without bond issues. This blissful condition of affairs can rarely be realized in an imperfect world, and when it is approached the price of the stock is likely to get so high that the owner is tempted to sell and realize his profits.

The investor's simplest guide is "earnings on price," provided that he also selects those stocks whose earnings show a tendency to mount up with reasonable regularity year by year. THE TICKER'S Bargain Indicator is prepared with a view to helping him to pick out these roads quickly and easily.

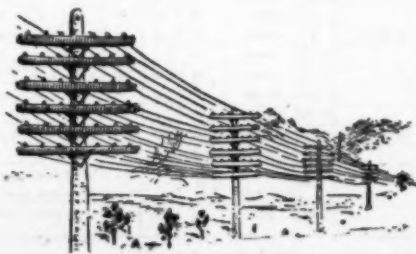
An Unreasonable Kicker

Investor (angrily)—See here. You told me I'd surely clear between five and six hundred dollars on that deal.

Broker—Well?

Investor—Well, I cleared just \$8.75.

Broker—Then you've got no kick. That's between \$5 and \$600, isn't it?—*Catholic Standard.*



PRODUCTION, ESTIMATED EARNINGS, AND DIVIDENDS

OF THE

Important Copper Mines of the United States, Mexico and Canada.

THOMPSON, TOWLE & CO.

Mine	1910 Production, Lbs. (1)	Prospective Rate of Pro- duction, within Two Years	(1) Cost per lb. Cents	No. of Shares Issued	Par Value	ESTIMATED EARNINGS PER SHARE						Rate and Amount of Last Dividend	Date of Last Payment
						11 Cts.	12 Cts.	13 Cts.	14 Cts.	15 Cts.	16 Cts.		
Amalgamated Copper	165,000,000 (3)			1,530,579	\$100	\$1 90	\$3 04	\$4 06	\$5 12	\$6 22	\$7 28	50¢	Feb. 27, 1911
Atmore	11,844,000	20,000,000	11	50,000	25		2 36	4 72	7 08	9 44	11 80		
Alamosa	4,864,000		11 1/2	80,111	25		23	70	1 16	1 53	2 11		
Asarco Copper	234,000,000 (3)		9 1/2	4,530,000	25	79	1 32	1 86	2 38	2 91	3 44	50¢	Apr. 10, 1911
Arizona Copper	23,150,000			2,940,010	50	17	25	30	51	62	73	10 to 36 SA	
Bates Copper	30,300,000		61 (8)	120,000	100								
Bessemer Confection	(4)			1,000,000	15	53	81	1 06	1 34	1 61	1 88	25¢	Mar. 1, 1911
Bradley Copper		27,000,000 (4)	71	2,330,000 (7)	5	59	78	80	1 09	1 36	1 63		
British Columbia	7,400,000	12,000,000	9	601,709	5	26	37	50	63	75	87	17 1/2¢	Mar. 1, 1911
Butter-Stockton	2,428,345		61 (8)	250,000	10	41	51	61	70	80	90	50	Aug. 1, 1910
Cahoon & Harbo	71,800,000		84	100,000	25	17 87	28 03	32 17	36 22	40 47	53 06	6 00¢	Mar. 25, 1911
Cahoon & Arizona (30)	30,020,000		5 1-3	300,000	10	3 72	5 13	6 50	7 92	9 32	10 73	1 00¢	Mar. 27, 1911
Cerro del	1,572,040		14 1/2	60,000	25								
Cerro de Potosi	34,700,000		64	100,000	100	9 87	12 14	15 61	19 06	22 55	26 03		
Chino Copper		50,000,000 (4)	8	800,000 (21)	5	1 86	2 80	3 12	3 73	4 27	5 00		
Copper Range	32,700,000		81 (34)	394,334	100	1 91	2 79	3 81	4 47	5 32	6 17	1 00¢	Apr. 1, 1911
East Butte	8,050,000 (10)		8	300,000	10	80	1 06	1 53	1 89	1 88	2 13		
First National	2,430,000		11 (11)	600,000	5	14	28	43	56	70	84		
Franklin	948,353	6,000,000 (4)	11 (25)	166,343	25		36	73	1 06	1 44	1 80		
Gilman Con.		10,000,000 (4)	9	1,500,000 (7)	5	13	20	27	33	40	48		
Grady Con.	20,000,000		10 1/2	147,362	100	67	3 02	3 36	4 71	6 06	7 40	1 00	Dec. 30, 1910
Grover Con.	48,650,000	70,000,000	11	2,486,813	20		19	37	56	75	94		
Imperial Copper	7,861,000 (12)		10	300,000	10	07	23	39	54	70	86	30	June 1907
Inspiration		50,000,000 (4)	9	1,100,000 (21)	10	91	1 36	1 82	2 27	2 72	3 18		
Isle Royale	7,407,000		11 5-10	150,000	25		10	61	1 11	1 61	2 12		
Isle Copper		10,000,000 (4)	8	100,000	25	3 00	4 00	5 00	6 00	7 00	8 00		
Mass Valley		12,000,000 (4)	8	254,000 (7)	5	1 43	1 89	2 36	2 83	3 30	3 75		
Miami Copper		40,000,000 (4)	9	748,326 (7)	5	1 07	1 80	2 14	2 67	3 20	3 74		
Miner's Copper	11,400,000		11 3-10	100,000	25		80	1 94	2 08	4 22	5 37	1 00	Feb. 1 1911
Nevada Con. (30)	66,800,000	70,000,000	6 9-10	1,916,762	5	1 23	1 66	1 95	2 30	2 63	3 06	27 1/2¢	Mar. 21, 1911
North Butte	35,947,000		10 1-3	410,000	15	41	1 03	1 64	2 27	2 88	3 50	30¢	Apr. 22, 1911
Ohio Copper	6,800,000 (12)	25,000,000	10 1/2	1,316,350 (7)	10	69	07	12	17	22	26		
Old Dominion	17,712,756 (14)		10 1/2	283,345	25	82	1 13	1 73	2 34	2 95	3 56	25¢	Apr. 6 1911
Oreoch	19,500,000		9 1/2	96,130	25	3 04	5 07	7 08	9 12	11 14	13 18	4 00SA	Jan. 20, 1911
Parrot (14)				228,880	30	31	82	73	90	1 14	1 35	15	May 29, 1911
Phelps-Dodge	114,688,000 (14)		8 1/2	480,000	100	7 14	9 74	12 34	14 94	17 54	20 13	2 50	Mar. 30, 1911
Quincy	22,517,000		10 1/2	110,000	25	1 03	3 07	5 12	7 16	9 21	11 26	1 00¢	Mar. 30, 1911
Ray Con. (17)		80,000,000 (4)	9	1,240,000 (7)	10	1 18	1 77	2 36	2 95	3 54	4 13		
Shannon Copper	17,000,000		11 1/2	330,000 (7)	10		36	77	1 25	1 80	2 30	50	July 1, 1907
Shattuck-Arto	14,781,000		(8)	380,000	10	2 18	2 80	3 02	3 44	3 86	4 28	1 00¢	Jan. 20, 1911
South Utah M. & S.	943,810 (23)	6,000,000	11	880,000 (7)	5		11	22	33	44	55		
Sup. & Boston	1,807,000		9 1/2	221,627	30	12	19	27	35	42	51		
Sup. & Pitts.	26,183,140		8 1/2	1,494,051	10	20	37	74	92	1 00	1 27	50	Apr. 17, 1911
Superior Copper	2,225,000	10,000,000	9	100,000	25	84	97	1 39	1 61	1 85	2 20		
Tamworth	11,063,000		147-10	60,000	33							4 00	July 23, 1907
Transamerica Copper (18)	12,429,000		10-6-10	200,000	25	25	32	1 48	2 10	2 72	3 34	1 50	Jan. 28, 1911
Treadwell	5,500,000		7 (8)	800,000	3	27	34	41	48	55	61	15¢	Feb. 15, 1911
United Verde	26,900,000		(8) (10)	200,000	10							75 per month	Apr. 3, 1911
Utah Copper (30)	125,000,000	210,000,000	7 8-10	1,512,849 (7)	10	3 42	3 06	3 80	4 70	5 45	6 30	75¢	Mar. 31, 1911
Utah Con.	7,480,471		12	380,000	5							20	Jan. 15, 1910
U. S. Smelting	25,000,000		(18)	Cons. 381,105 716,486,319	80	On a 4 On a 7	% divi % divi	fixed to fixed to	split split			50¢ 87 1/2	Apr. 15, 1911 Apr. 15, 1911
Wolverine	6,897,000		7 1/2	60,000	25	5 81	7 38	8 85	10 47	12 08	13 60	5 00SA	Apr. 1, 1911

Foot-Notes on Copper Table

(See Opposite Page)

(1) Where actual figures were not available, estimates have been made.

(2) Amalgamated's production and earnings are based on the proportionate holdings in Anaconda and Greene-Cananea. The company owns 3,071,740 shares of Anaconda and 100,000 shares of Greene-Cananea. By the absorption of the United Metals Selling Co. Amalgamated should derive additional annual profits of \$1,250,000 less interest on \$12,500,000 5% notes. These earnings are included in figures shown. Amalgamated dividends from Anaconda amount to \$6,143,480 a year, or approximately \$4 per share.

(3) Anaconda's total production, including custom ore, was 267,000,000 pounds, of which the figures given are for company's mines. The earnings shown do not include profits derived from smelting custom ore or from the subsidiary companies. The latter are estimated at \$500,000 per annum.

(4) Earnings based on prospective rate of production.

(5) Not available.

(6) Earnings of Butte Coalition are based on earnings of 520,000 shares of Anaconda, and 3,000 shares of International Smelting & Refining. Butte Coalition receives \$1,040,000 in Anaconda dividends. The company has \$3,700,000 surplus, from which it derives approximately \$100,000 a year interest.

(7) Assuming all issued bonds converted.

(8) Cost per pound and earnings are result of high grade shipments.

(9) The low cost of copper is due largely to high gold and silver values in the ore.

(10) Production from company's mines total output, including custom ore, amounted to 10,023,568 pounds.

(11) Production in 1910, including custom ore, at First National was 9,911,451 pounds. The cost of 11 cents included several extraordinary expenditures such as examinations, damage claims, etc., in connection with fume trouble at smelter.

(12) Produced in 1910 to August 15. Since that development work only.

(13) Present production 700,000 pounds per month at a cost of between 9½ and 10 cents per pound according to management.

(14) The output of the Old Dominion Smelter for the year was 27,742,332 pounds,

of which the production shown was from the company's own mines.

(15) Parrot's earnings are based on 90,000 shares of Anaconda.

(16) During the year Phelps-Dodge reduction plants produced 138,875,000 pounds, of which production shown was from company's mines.

(17) The figure of 80,000,000 pounds shown for Ray Consolidated is for the 8,000-ton concentrator now under construction. The management believes that this plant will possibly produce 100,000,000 pounds.

(18) Cost per pound and earnings do not include profits from sulphuric acid plant. Latter should add profits of about \$2 per share after bond interest. Total production for year was 16,576,335 pounds, of which 4,147,000 pounds was custom copper. In addition to stock issued company has \$1,500,000 6% bonds.

(19) Copper a small proportion of company's output. Its principal earnings are from silver operations.

(20) During the year 1910 Utah produced from its own mines 89,000,000 pounds of copper at a cost of 8.1 cents per pound. The production and cost shown for Utah includes the proportionate production and earnings of Nevada Consolidated. Utah owns 1,000,500 shares of Nevada Consolidated's 1,998,762. Utah receives \$1.50 per share per annum on their holdings in Nevada Consolidated.

(21) Assuming that an additional 100,000 shares will be issued and property on a producing basis.

(22) Production South Utah is from middle of September, 1910, when mine began operating. Present rate of production between 350,000 and 400,000 lbs. per month. Cost December and February between 10½ and 11 cents.

(24) R. R. earnings not included.

(25) Franklin's cost has been taken at 11 cents. Including extraordinary construction and development it has been over 25 cents per pound. Earnings shown are for 6,000,000 pounds production.

(26) The merger of the Calumet & Arizona and Superior & Pittsburg will increase the outstanding stock of C. & A. to 650,000 shares, instead of 200,000 shares.



The Fluctuation Value of Active Stocks

A Surprising Variation in the Yearly Movements of Different Classes of Stocks.

By G. C. SELDEN.

IN the May number of THE TICKER, Rollo Tape, in his "Studies in Stock Speculation," presented a table showing that the low-priced stocks were the best purchases in the 1907 panic. This opens up a very large and interesting question, and one that is of practical importance to every trader or investor.

Whenever you make up your mind that the time has come to buy or sell stocks, the next question is "Which stocks?" With several hundred fairly active issues to choose from, there is considerable discretion here, and your decision may easily make all the difference between liberal profits and no profits at all.

If the low-priced stocks are the best purchases after a panic it would seem reasonable that some of them, at least, would be the best sale in a boom. Some of them will very likely have grown into permanent dividend payers, so that they have really lifted themselves out of the category of "low-priced" issues; but this will naturally be true of only a few, and the others, having had a greater proportional advance than the established investment stocks, must, it would appear, have a correspondingly greater decline under bearish conditions of the general market.

This raises the question of the "fluctuation value" of different stocks. For either the month-to-month trader or the investor who is trying to "buy low and sell high"—really a speculator, though he often doesn't like to be called by that name—the most profitable stock is the one that has the widest fluctuations in proportion to the amount of capital required to handle it. Each stock has a fluctuation value in addition to its investment value.

THE SCIENTIFIC METHOD.

I notice that some of the "old-line" (as an insurance man might say) writers on market topics are trying to be sarcastic about the application of "scientific methods" to the stock market, the study of "fundamentals," etc. I want to predict right here that such writers will have to fall in line with these new methods or else drop behind the procession. The old way of writing about the market has always been to guess which way prices were going to move and then study up as many arguments as possible to support your guess. It has been conspicuously unsuccessful, but since the public could get nothing better, there has been a demand for this kind of literature. Now that something better is being offered the public, the consumption of these guesses is going to fall off rapidly.

"You won't have much success in trying to help the public make money in the market," said a financial writer to me recently. "The public always has lost money and always will. All the machinery of Wall Street is organized on that basis."

The man who said this does not appear to be particularly successful, and no wonder. Only a part of Wall Street has ever held the point of view he stated, and that part is growing smaller every day. He is ten years behind the times, to say the least. There has been for years an army of semi-speculative investors who have made money in Wall Street with reasonable regularity, and recruits are joining that army daily. Intelligent study of the situation is what is doing it. Also the number of brokerage houses which make every effort not only to get their customers into the market under favorable conditions, but to get

them out with a profit, is constantly increasing—though it is still true that the majority of brokers do not make as thorough a study of fundamentals and sound methods as they ought, in justice to themselves and to their customers.

The world is just waking up to the fact that scientific methods can be applied to *anything*. Bricklaying, which has remained substantially unchanged since the building of the pyramids, has been reduced to a science with astonishing results. The efficiency of shovelers, even—about the least skilled labor imaginable—has been tripled by scientific methods. These methods were worked out by *charts*, too, awful as that may seem to those contemptuous noses which always turn up at the mention of the word "chart."

Scientific methods simply mean beginning at the other end. Instead of first guessing at the market and then digging up reasons to support the guess, the student of modern methods begins with a mind from which all preconceived opinions have been carefully erased. He then starts in to compile the *facts* which may be supposed to have any influence on the situation, and to reduce them to visible form—usually a table, chart or diagram. Next he makes a long and painstaking search for any apparent correspondence between the facts thus spread forth and the action of the stock market. When such a correspondence appears, he then searches for the *reason* behind that correspondence. If he cannot find a logical reason he concludes that the correspondence may be accidental, and waits for more light. If he can see the reason, he considers it in all its bearings, and if it still appears sound, he looks upon the correspondence as temporarily established, in the absence of any new evidence tending to disturb his conclusion. The longer the time that elapses without such new evidence, the more firmly his conclusion becomes fixed.

A good deal of work, certainly; and to the ordinary investor or writer on the stock market work is very painful. Also, it requires some penetration and some knowledge of methods employed in other branches of science. But if there ever was any spring in Wall Street from

which money could be induced to flow without work, it has gone dry.

COMPARATIVE FLUCTUATIONS.

The application of scientific methods to this particular problem is very easy. We want to find out which stocks fluctuate the most widely in proportion to their value. We first find the difference between the highest price and the lowest price of each stock annually for each of the last five years. Averaging the five years for each stock, we get the average annual fluctuation for that stock.

Then, averaging the price of the stock for the five years, we get an average price with which to compare the average fluctuation. We now figure the per cent. of the average fluctuation on the average price for each stock, and arrange the stocks in a table in the order of these per cents., rails and industrials separately.

The result is the table shown herewith. The stocks in each group are given in the order of their fluctuation value in proportion to average price for five years. To illustrate: We see that the average annual fluctuation of Wabash preferred has been 27, against 26 for Pennsylvania, although the average price of Wabash has been less than one-third that of Pennsylvania. That is, \$1,000 invested in Wabash would have stood the same chances of profit as \$3,000 invested in Pennsylvania; for Wabash is accustomed to fluctuate each year over a range equal to 67 per cent. of its average price, while Pennsylvania covers a range of only 20 per cent. of its price.

The investor could not be sure that this would be the result in any one case, but these would be the probabilities, aside from any special considerations that might interfere. Such special considerations always would interfere, but they would be just as likely to work in his favor as against him. In 1908 and 1910, for example, Wabash, in spite of its lower price, covered a range equal to nearly twice that of Pennsylvania; while in 1906 and 1907 Pennsylvania was well in the lead in actual difference between high and low—though not, of course, in proportion to price.

On examining the railroad section of

this table a little more carefully, we find that several distinct groups of stocks are to be observed:

(1) Low-priced, non-dividend stocks—Wabash, Erie, Southern Railway, Denver and Texas & Pacific. All these roads have, of course, great future possibilities, but those possibilities are yet to be realized. The earnings on such stocks may amount to a fair per cent. in good times, but entirely disappear in hard times. The value of these stocks is much more dependent on business conditions than that of Pennsylvania, which has paid regular dividends for fifty years; hence, naturally, they fluctuate more in price—a perfectly reasonable thing for them to do.

Perfectly reasonable, yes; yet after every panic, when all prices are relatively low and business is dull, the public is always exhorted to buy "the sound, dividend-paying stocks, like Pennsylvania or Northern Pacific," and is most earnestly dissuaded from tying up its money in "cats and dogs" like Wabash or Texas. Evidently there is a side to this argument that has escaped the attention of some people.

(2) Two stocks which have advanced to the semi-investment class during the five-year period considered—Chesapeake & Ohio, and Colorado & Southern. The advances in price resulting from increased earnings have, of course, operated to widen the annual fluctuations. It is quite possible that these two stocks may fluctuate less in proportion to price during the next five years, owing to the considerable change in the character of the roads.

(3) Missouri Pacific, which stands by itself, with great opportunities, not as yet taken advantage of.

(4) The rest of the list is comprised of standard dividend-payers. In a general way, the more speculative come first and the more strictly investment issues at the bottom. The character of Louisville has changed during the period, and its fluctuations are not now as wide as they have averaged during the five years.

An important road purposely omitted is Rock Island, because of the changes resulting from its temporary ownership of the Frisco, and because of its ridiculous flurry up to 81 in 1909. Of course

no attempt has been made to cover all companies in this table.

Among the industrials, no special groups are distinguishable, except that the low-priced stocks lead and the highest priced are found near the foot of the list. Probably very few persons would have supposed that Colorado Fuel and Republic Steel fluctuated more in proportion to price during this period than United States Steel common, yet such was the case. The unexpectedly low position in the table of Copper and Smelting is partly due to the very high prices of those stocks during the first of the five-year period, which raises the average price.

The variations among the industrials given are even sharper than among the rails. In Colorado Fuel you got just four times as much of a "run for your money" as in Telephone, and twice as much as in that highly active stock, Consolidated Gas. Truly, things are not always what they seem.

It is a simple matter to figure the same per cent. for any other stock in which you may be interested. Any of the monthly investor's manuals or records will give you the necessary prices.

One or two other considerations should be borne in mind in this connection. First, your commissions on an investment of \$5,000 in a stock selling at 40 will be twice the commissions on an investment of the same amount in a stock selling at 80. Not a very great item, but worth remembering. Interest charges will be in proportion to price, so they don't affect your relative profits.

A second point is that, when you are working on the long side, you will get dividends on most of the stocks from the middle of each list down to the end, while there will be no dividends on the stocks at the head of the lists. This element of the situation is more important than the commissions, but is usually given more weight than it is worth. To the average investor one dollar in dividends looks at least as big as three dollars of profit, because he considers the dividends a certainty. They are not always a certainty, as holders of Baltimore & Ohio and other stocks (before reorganizations) had occasion to observe. Indeed, it is a question whether a decline

Yearly Fluctuations of Important Stocks

RAILROADS.

	1906.	1907.	1908.	1909.	1910.	Avg. fluctua- tion.	Avg. price.	Per cent.
Wabash preferred	17	24	40	21	33	27	40	67
Erie common	13	32	24	17	15	20	31	65
Sou. Ry. common	11	24	18	12	16	16	26	62
Den. & R. G. common	13	27	26	17	29	22	37	59
Tex. & Pac.	12	20	25	10	14	16	30	53
Ches. & Ohio	14	33	34	36	27	29	58	50
Col. & Sou. common	10	22	38	17	20	21	44	48
Mo. Pac.	21	48	39	13	32	31	68	46
Reading Common	42	69	51	55	42	52	131	40
Union Pacific common	57	83	74	47	52	63	166	38
Southern Pacific	36	33	56	25	35	37	100	37
Atchison common	25	42	35	27	33	32	98	33
C., M. & St. P. common	*	64	49	24	45	45	135	33
Louisville & Nashville	20	60	38	42	29	38	131	29
Norfolk & Western	14	36	28	18	20	23	85	27
Baltimore & Ohio common	20	47	35	19	19	28	106	26
N. Y. Central	30	46	36	27	23	32	122	26
Northern Pacific	*	*	40	26	34	33	137	24
Canadian Pacific	46	47	40	24	26	37	173	21
Great Northern	*	*	35	21	26	27	136	20
Penn. R. R.	25	38	24	25	16	26	127	20

INDUSTRIALS.

	1906.	1907.	1908.	1909.	1910.	Avg. fluctua- tion.	Avg. price.	Per cent.
Colo. F. & I. common	43	44	26	24	28	33	41	80
Am. Beet Sugar common	15	16	15	29	23	20	26	77
Rep. I. & S. common	20	29	14	23	19	21	29	72
U. S. Rubber common	21	39	20	30	25	27	38	71
Cent. Lea. common	16	28	18	26	23	22	33	67
U. S. Steel common	28	28	33	54	30	35	54	65
Utah Copper	16	26	33	28	21	25	39	64
Va.-Car. Chem. common	27	27	30	16	19	24	41	59
Am. Loc. common	25	43	28	20	33	30	54	56
Sloss-Shef. common	29	52	46	26	38	38	68	56
Am. Car. & F. common	15	21	25	32	33	25	46	54
Beth. Steel common	9	13	15	18	7	12	22	54
Am. Ag. Chem. common	14	15	22	17	14	16	30	53
Amal. Copper	26	80	43	31	35	43	82	52
Am. Smelt. & Ref. common	36	97	52	27	43	51	104	49
U. S. Realty	20	54	28	27	20	30	69	43
Con. Gas. (N. Y.)	51	66	71	51	38	55	135	41
Pac. Coast common	39	68	28	40	19	39	100	39
Gen. Elec.	28	73	52	23	27	41	149	27
Nat. Bis. common	17	28	29	24	20	24	89	27
Am. Tel. & Tel.	15	45	32	20	17	26	127	20

*Rights or new stock issues make figures for these years misleading.

that would practically wipe out the value of Erie common, for example, would not also wipe out the dividends of New York Central or St. Paul.

Third, when taking the short side for a pull of a year or two, it is better to select a non-dividend payer, providing you can avoid stocks which are undergoing the transition from the non-dividend to the dividend stage. These latter stocks may hold very stubbornly against a bear market—though it is the general rule that such transitions are made during a bull market by means of a greater advance than the rest of the market, while in a bear market they go down as much as other similar issues. If you are

short of a dividend-payer for a year, the price will of course "recover" the dividends some time during the year, though not necessarily at once; so that you are practically put to the expense of the dividends, just about the same as you pay interest on the long side when you buy on margin.

All in all, this table contains some very useful suggestions in the selection of stocks for purchase or sale under different conditions and to meet the requirements of different persons. It especially demonstrates that the mistake of the public is not so much in buying the "cats and dogs," as in buying them at the top of a bull market.

The Copper Situation

A Special Report Prepared for The Ticker by Wrenn Brothers and Company

IN order to understand the present copper situation, it is necessary first to look at the causes which brought about the collapse of 1907 in both the copper metal and the prices of copper stocks. During the two years prior to March, 1907, owing to the general boom in manufacturing and industrial business, the demand for copper was abnormally great, and the price of the metal rose higher and higher, breaking all previous records back to 1880. The high price of the metal and the very large profits made by copper companies naturally attracted capital into the copper mining business in large amounts. The result was that by 1908, just as the boom in general business collapsed of its own weight, our copper producing capacity had been enormously increased by this influx of new capital.

That the copper metal should decline with the shrinking volume of business, as it did in 1908, was perfectly natural and generally understood; but that it should slump so drastically, and that in 1909 it should rise so little, was not gen-

erally understood. The reasons, however, are not far to seek. Copper is consumed so largely in the manufacture of new machinery and equipment, and in the construction of new mills, factories, electric lighting and power plants, and in street railway, telegraph and telephone lines, that its consumption does not rise and fall with the volume of activity of general business. Instead, it rises and falls with the demand for new equipment, machinery and construction work.

Moreover, this new work proceeds with abnormal rapidity during boom times, and declines so greatly during depressions that it might almost be said to temporarily cease altogether. To be sure, the amount of such new construction work and improvement work done in 1909 and 1910 was abnormally large in comparison with the earnings of most corporations; but the copper metal was prevented from responding by the fact that it was just at this time when the increased producing capacity consequent upon the influx of capital of 1905, 1906 and 1907 resulted in throwing upon the

copper market an excessive supply of new metal. The increase in the world's production for the year 1909 was about 13.4 per cent. as compared with a normal average of 6 per cent. As this increase was the inevitable result of the large influx of new capital, it was not to have been expected that the copper metal would show any great strength at that time.

Now, however, the situation is gradually changing. At current metal prices, probably not more than two-thirds of the world's copper companies can produce at a profit; and indeed, ever since the autumn of 1907, the influx of new capital has been checked. There have, it is true, developed a large number of new producers of great importance. Nevertheless, the check to production was so effectual that in 1910 the world's increase was only about 1.08 per cent. as compared with 13.4 per cent. the previous year.

In a word, the causes of the trouble were the high prices and consequent over-production, and the usual remedy, namely, low prices and consequent checking of production, has now been applied. In like manner, the high prices of 1872 resulted in a 24 per cent. increase in the production of the United States in 1873, and after the slump in prices, the rate of increase fell to 2.9 per cent. in 1875. The same experience was repeated in the eighties, and again in the nineties; and indeed, the history of the copper mining industry has been marked by constant repetitions of this same experience.

There is, in our opinion, no longer any reason to expect further heavy liquidation of either the copper metal or copper stocks; for the slump in prices and the checking of production have already resulted in such liquidation. At the high prices of 1907, the aggregate market value of all copper mining companies in the United States was approximately \$1,030,000,000; and these same companies, at the low prices of this year, were worth only about \$394,500,000, thus showing a shrinkage of \$635,500,000. Moreover, stock prices have remained around the low level so long that investors have adjusted themselves to this loss.

Incidentally, the dividend payments of the leading companies in the United States were reduced from \$49,400,000 in 1906 to \$19,228,000 in 1908. On account of the great extent and the thoroughness of the liquidation which has occurred, it is difficult to imagine any situation which could now bring about renewed liquidation on any large scale. The decline in copper stock prices since 1907 is already greater than any previous declines on record. In the depression of the eighties, the shrinkage was 58.87 per cent.; in that of the nineties, 37.01 per cent., and in 1903, following the attempted Amalgamated monopoly, the shrinkage was 61.47 per cent. Since 1907, however, the average price of twenty representative copper stocks has fallen 61.7 per cent.

It is not to be inferred, however, that any immediate and sustained rise is in sight, for it is characteristic of the copper metal to remain at the low prices for long periods, and at the high prices for short periods only. In the seventies, the rise from the low prices began in May, 1871, and the metal was down again in November, 1873; in the eighties the rise began in October, 1878, and the metal was low in June, 1880; the next rise began in May, 1887, and the metal was down again in December, 1891; the following rise began in July, 1898, and low prices were the rule in January, 1902; it was not until July, 1904, that the next rise began, and the metal returned to a low level in October, 1907, where it has remained ever since.

Of course, the reason why metal prices remain at the low level so long is that prices are periodically over-stimulated by a boom in manufacturing and industrial business, and that this results in an influx copper mining of excessive amounts of new capital, and later in over-production. On account of this over-production nothing less than another boom in manufacturing business again carries the metal to a high level.

Nevertheless, the metal has remained at the low level about long enough, as shown by the following exhibit of the periods during which it remained at low levels in the past:

April, 1866, to May, 1871.

November, 1873, to October, 1878.

December, 1884, to May, 1887.

December, 1891, to July, 1898.

Statistically, the metal situation is now rather strong, since the world's current production is, according to our estimates, somewhat below the normal rate of consumption—although it must, of course, be considered that consumption is restricted, especially in the United States, by the poor condition of trade. Moreover, the increase in the world's output for 1911 promises not to exceed 2 per cent. as compared with a normal average of 6 per cent. Much is made of the prospective output of the new porphyry companies which are just beginning production; but the amount of metal to be thrown on the market by them the current year will probably not exceed 50,000,000 lbs.—whereas at the same time many old producers, large and small, are occasionally either dropping out altogether, or else reducing their output.

Nor should it be forgotten that production should normally show about 6 per cent. increase, and that 6 per cent. now represents a considerable tonnage. For the United States it means an increased annual output of about 67,000,000 pounds, and for the world, of about 117,000,000 pounds; and it is quite unlikely that this annual rate of increase will be reached for two or three years at least.

In brief, the only depressing factor of importance is, in our opinion, the condition of general business. It seems apparent that the general inflation of

1909 has been only partially eliminated, and that before another boom in trade is likely to occur, there must be a substantial further liquidation of debts. This promises to be accompanied by a substantial curtailment in the consumption of manufactured goods, and in the amount of new construction and improvement work; and such a curtailment might still further temporarily reduce the demand for the copper metal.

It is, therefore, possible, notwithstanding the strong position of copper itself, that metal prices may drop still lower whenever this liquidation of debts occurs. Meanwhile, both metal and stock prices are so much nearer the bottom than the top, and the liquidation which has already occurred in the copper industry has been so drastic, that there can be but little risk in the outright purchase of standard copper stocks.

The danger of any material depreciation in them is surely much less than in other industrial stocks dependent upon the manufacturing business; and even if such depreciation should occur, the recovery would almost surely be repaid, since copper stocks are selling so far below their average values. Hence, while lower metal prices are still possible in consequence of the general trade situation, it would seem that good copper stocks bought around present low prices and held until the next boom in trade occurs, should show excellent profits, since copper stocks in a bull market usually appreciate from 100 to 200 per cent.



Forecasting Trade Conditions by the Area Theory

By ROGER W. BABSON*

FROM time immemorial men have been making plots with the idea of forecasting trade, metallurgical, astronomical and other conditions. The earliest plots of which we find record are those prepared by the Egyptians, remnants of which exist on monuments and stone tablets. We find that the rise and fall of the Nile river was charted by the statistical department of the Pharaohs for the purpose of forecasting future changes in height of the river.

The Greeks also devoted considerable attention to the study of charts and plots, although their work was more along astronomical lines. They charted the heavens and worked out very interesting and intricate charts whereby they thought they could forecast future storms and other events. The Romans also studied charts with the idea of forecasting trade conditions, and in a work which I am now reading on the conditions of Roman trade at the time of Julius Caesar, some very interesting data is given, while the records of Genoa and Venice show clearly the attempts which their merchants made along these lines.

As is well-known, Columbus and his contemporaries, Sir Walter Scott and his contemporaries, and others, made studies similar to much being done today; but time will not permit us to go into further detail concerning the historical end of this work. Sufficient it is to say that all of these charts were based simply on one dimension. As the old philosophers believed the world was flat and missed the second dimension in their geographical studies, so they all seemed to miss the importance of considering the second dimension in their studies of charts. In other words, up to within the past decade, all charts of business and

trade conditions have been based either on the record of *time* or the record of *intensity*, and have been what are known as single line charts.

For instance, when the Egyptians charted the flow of the river Nile, they considered simply the height of the water and not the force at which it was flowing. In the same way, when economists have charted the prices of commodities, they have simply considered the height reached by these prices without considering the period of time during which these prices have remained high or low. If, for instance, the normal price of wheat is \$1 a bushel and the previous high point was \$1.50 a bushel, they have considered the price of \$1.25 as only a medium high price, believing that the next upward movement would approximately reach and perhaps exceed \$1.50 before the market turned. In short, they have failed to recognize that it consumed as much "energy," so to speak, to keep the price at \$1.25 for a year or more, as it would to keep it at \$1.50 for a few months. Therefore, the vital point to remember about the Area Theory is that when prices, clearings, failures, earnings, etc., remain at medium high figures for a long period of time it is equivalent to their being at a much higher figure for a short period of time.

Not only did the old philosophers and economists make this mistake of considering one dimension in their study of trade and finance; they also made the same error in their study of mechanics, chemistry, medicine, astronomy and all of the sciences. Comparatively speaking, it was only a short time ago that engineers began to base their work on the foot-pounds consumed instead of on the one factor of space or weight. When our universities were first founded, a force was

*Extracts from an address before the Finance Forum.

not considered the *product* of two factors. It was not thought that it required the same energy to move one pound through 100 feet of space as to move 100 pounds through one foot of space. The law of "action and reaction being equal when the total force involved is considered" was not recognized by the scientists until some time after Newton died. We who were graduated from leading universities within the past few years, are accustomed to think that the law of action and reaction has always been taught in connection with scientific studies, but such is not the case.

THE AREA THEORY IS NOT NEW, EXCEPT AS APPLIED TO TRADE AND FINANCE.

Therefore, the adaptation of this great law to economics and psychology is not a new departure; but simply a part of an evolution which has been going on in all the other sciences during the past 200 years and has only recently reached its present state of perfection. Therefore, the *first* point which I wish to impress upon you is that practically all previous chart work has been based on only one dimension, namely, either time or intensity and *not upon their product*, and *secondly*, I wish to impress upon you that the present-day work, in which I am so greatly interested, is not based upon one dimension, but upon the *product* of two dimensions. This simply brings economics and psychological investigations up to the same point to which chemistry, mechanics, astronomy and the other sciences have progressed.

The old idea was that the periods of depression and prosperity must come with some regularity; that is, that we must have a period of depression every so many years. After the days of Joseph the Egyptians thought that this must come every seven years; while certain financial writers of nowadays think it must come either every ten or twenty years, but no definitely regularity can be counted upon, as it all depends upon the *intensity* of the period. If the depression is very severe, conditions will mend quickly and it will be of a short duration; or if the period of prosperity is reckless and extraordinary, it can last only a relatively short time. On the other hand, if the depression is slight it

will take some years to readjust conditions; and in the same way if the period of prosperity is moderate, it will last a greater number of years. Therefore, the position taken by many financial writers that history will repeat itself, and as panics have come with certain regularity at times past, said regularity will continue in the future, *has absolutely no economic basis*. In the same way, those who believe that prices must reach a certain height before they turn to go downward, or must reach a certain low point before they can turn to go upward, are absolutely wrong in their assumptions. Everything depends on the product of the two factors and *not* upon either factor independently.

Now, granting that these *areas* of prosperity and depression must be equal, the present period of prosperity is about two-thirds consumed and one-third remains.* Therefore, to forecast trade conditions, it is simply necessary to ascertain how long we shall be consuming this remaining third. A period of readjustment is ahead and the next great movement must be below the average line of growth; but we wish to know more than that, namely, how long it will be before we enter this depression? This depends upon the rate of flow, so to speak; if conditions will moderate down we may be two or three years consuming this remaining third of the period. On the other hand, if the throttle is opened wide and conditions are pushed and business is forced, we may use it up in a comparatively few months.

Therefore, to return to the subject of my talk, concerning forecasting trade conditions, it will be seen that, based on the area theory, we are facing a period of readjustment or depression to be worked out below the line of growth, and that this depression will probably come sometime within the next few years, depending on the rate of flow, which can only be told by watching conditions from week to week. If each week our prosperity increases in height, we may be sure that the period of depression is rapidly approaching. On the other hand, if it decreases in height and

* These figures were for January, 1911. However, since that date the addition to the "prosperity area" has been small, as the height of the area is now relatively low.

business flattens out and keeps only a little above the line of growth, it is safe to assume that present trade conditions will last for two or three years more.

These Composite Plots may be made in various ways and based on figures of an almost unlimited number of subjects, but after talks with leading economists and psychologists throughout the world, our work is confined to the subjects under the following headings:

Mercantile Conditions:

- Immigration,
- Bank Clearings,
- Failures,
- New Buildings.

Monetary Conditions:

- Domestic Money Rates,
- Surplus Reserves,
- Foreign Money Rates,
- Commodity Prices.

Investment Conditions:

- Prices of Securities and Number of Shares Traded in on the New York Stock Exchange.
- Condition of Leading Crops.
- Political Conditions,
- Railroad Earnings.

INDIVIDUAL CHARTS.

Individual charts also show graphically the trend of conditions and the relation of trade today with similar periods during previous cycles. Although these individual charts cannot be depended upon of themselves, they are distinctly helpful in checking the Composite Plot. If the Composite Plot increases in height, it is well to note the individual plots and ascertain to what this is due. Not only are some subjects of more importance than others, but certain subjects may be especially affected by specific conditions which are more accidental than fundamental. Moreover, the individual charts are of great value in studying certain subjects such as, for

instance, banking conditions. Thus, in addition to studying the Composite Plot which enables you to forecast the broad monetary conditions, one ought also to give special attention to the following separate charts:

Relation of Loans to Deposits.

Relation of Loans to Aggregate Resources.

Relation of Reserves to Deposits.

Together with several other charts, such as Failures, Clearings, etc.

For example, few bank men understand the true significance of the chart on the Bank Clearings. Ask an officer of your bank what the chart of Bank Clearings shows and he will tell you that it shows only the activity of general trade. This is true, but it does not give a hint to the dangerous feature of large Bank Clearings. If increased bank clearings simply show increased trade, the larger the clearings the better, and a constant growth would be distinctly favorable.

Large Bank Clearings, however, show something much more vital. They show the rapidity with which money is being circulated. They show the extent to which our currency is being inflated, as a dollar passing through six hands in one week, answers the same purpose as does six dollars passing through one hand during the week. In other words, our currency is not only inflated by the use of paper money and credit in its various diversified forms, but it is being inflated by our huge bank clearing system. Some day this clearing system will receive a jar which will bring a financial and monetary panic on this country such as has not been seen since 1837. Money, circulated in this way at such a rapid rate as shown by the chart on bank clearings, when retarded will cause a shock which will have the same effect as suddenly destroying a large proportion of our actual currency.

(To be concluded.)



THE BARGAIN

Comparative Earnings

NOTE—The minus sign (—) before figures below indicates a DEFICIT for the year equal to the per cent of ordinary expenses of maintenance, since earnings invested in improvement of the property increase the earnings of the property. The first advantage of the Bargain is that subscribers get the first advantage of the Bargain two days before it appears on the news-stands, subscribers get the first advantage of the Bargain

RAILROADS

	Present div. rate.	Earnings on par for fiscal year ending on any date during						Earnings on price last	
		1906.	1907.	1908.	1909.	1910.	1911.	Present price.	last price, fusc. yr.
1 Denver & Rio Grande com.....	0	3.7	5.0	3.3	2.0	4.4	.....	29	15.2
2 Hocking Valley com.....	4	9.9	11.2	6.0	8.3	18.2	.....	132	13.8
3 Colorado & Southern com.....	2	3.5	4.5	4.8	4.9	7.3	.....	54	13.5
4 Lehigh Valley com.....	10	18.2	20.0	19.2	15.4	23.0*	.....	177	13.0
5 Chesapeake & Ohio.....	5	7.3	5.4	4.4	6.4	10.0	.....	82	12.2
6 Louisville & Nashville.....	7	10.6	10.7	7.5	14.3	17.3	.....	147	11.8
7 Minneapolis, St. P. & S. S. M. com	7	11.7	9.6	8.4	8.8	15.7	.....	138	11.4
8 Southern Pacific com.....	6	8.1	12.5	7.4	10.2	13.0	.....	117	11.1
9 Norfolk & Western com.....	5	9.7	9.0	7.1	8.7	11.6	.....	107	10.8
10 Union Pacific com.....	10	14.2	16.5	16.2	19.1	19.2	.....	182	10.5
11 Reading, com.....	6	13.9	13.0	12.7	13.2	16.1	.....	158	10.2
12 Sioux City Rapid Transit.....	6	8.1	8.2	8.3	9.9	10.9	.....	110	9.9
13 Atlantic Coast Line R. R.....	6	10.8	6.3	5.6	9.4	12.0	.....	126	9.5
14 Erie com.....	0	2.2	3.0	—3.7	0.3	2.9	.....	33	8.8
15 Baltimore & Ohio com.....	6	12.6	9.9	5.1	7.1	8.9	.....	106	8.4
16 Southern Railway com.....	0	1.9	—0.6	—2.2	0.5	2.3	.....	28	8.2
17 Atchison com.....	6	11.8	15.0	7.7	12.1	8.9	.....	112	7.9
18 Pennsylvania Lines.....	6	11.7	10.7	9.0	11.0	9.3	.....	122	7.6
19 Delaware & Hudson.....	9	12.6	15.2	12.4	12.2	12.5	.....	172	7.3
20 New York, New Haven & Hartford	8	12.2	9.2	5.4	7.4	10.3†	.....	145	7.1
21 Northern Pacific com.....	7	14.5	15.1	12.8	10.7	9.0	.....	127	7.1
22 Brooklyn Rapid Transit.....	5	4.8	4.8	4.1	4.2	5.6	.....	80	7.0
23 Canadian Pacific.....	10	14.1	13.7	10.6	8.6	16.0	.....	235	6.8
24 Delaware, Lackawanna & Western.	20	22.2	38.5	40.8	52.8	35.4	.....	530	6.7
25 Great Northern pfd.....	7	13.0	11.8	7.1	8.3	8.5	.....	128	6.6
26 Missouri Pacific.....	0	8.1	9.9	3.7	1.3	3.3	.....	50	6.6
27 Chicago, Milwaukee & St. Paul com	7	12.3	10.5	9.5	7.2	8.0	.....	123	6.5
28 Pittsburgh, C. C. & St. L. com...	5	8.6	8.8	7.2	9.8	6.1	.....	95	6.4
29 Buffalo, Roch. & Pittsburgh com...	5	8.6	8.7	6.2	6.3	7.3	.....	115	6.3
30 Kansas City Southern com.....	0	0.3	5.4	2.6	3.4	2.2	.....	35	6.3
31 St. Louis Southwestern pfd.....	4	2.8	7.9	1.6	2.9	4.1	.....	67	6.1
32 New York Central.....	5	4.6	6.2	5.1	7.7	6.4	.....	108	5.9
33 New York, Ontario & Western.....	2	2.0	2.8	2.6	2.3	2.3	.....	43	5.3
34 Chicago & Northwestern com.....	7	14.8	12.7	11.2	11.4	7.7	.....	147	5.2
35 Illinois Central.....	7	.....	.....	8.4	7.4	7.1	.....	137	5.2
36 Chicago & Alton com.....	0	1.0	5.2	2.5	4.2	1.4	.....	31	4.5
37 Minneapolis & St. Louis pfd.....	0	10.4	7.8	2.7	—2.4	1.9	.....	44	4.3
38 Wisconsin Central com.....	0	1.7	3.2	—0.6	0	2.5	.....	70	3.6
39 Wabash pfd.....	0	—5.4	0.9	0.3	—0.5	1.3	.....	37	3.5
40 Cleveland, C. C. & St. Louis com.	0	4.13	3.1	0.4	4.8	2.1	.....	62	3.4
41 Chicago Great Western pfd.....	0	.....	.....	.....	.....	1.2	.....	44	2.7
42 Rock Island Company pfd.....	0	.....	.....	.....	.....	1.6	.....	62	2.6
43 Missouri, Kansas & Texas com.....	0	1.8	5.0	0.4	0.7	0.8	.....	34	2.4
44 Western Maryland.....	0	.....	.....	.....	.....	0.9	.....	59	1.5
45 Lake Erie & Western pfd.....	—0	3.1	2.0	—2.0	0.8	—0.2	.....	35	0
46 Iowa Central pfd.....	0	4.2	7.8	3.8	—4.1	—0.4	.....	31	0
Preferred stocks earning more than the per cent. to which the dividend is limited, but now receiving either no dividend or less than said limit.									
1 Erie second, preferred.....	0	19.4	24.9	—22.1	6.4	24.3	.....	40	60.7
2 Erie first preferred.....	0	10.4	12.3	—3.4	6.1	12.1	.....	31	23.7
3 Southern Railway preferred.....	1	8.7	3.8	0.7	6.0	9.6	.....	67	14.3
4 St. Louis & San F. second pfd...	0	13.2	24.7	1.6	8.2	5.8	.....	42	13.8

*On \$40,441,000 stock; on \$60,502,000 now outstanding, earnings would be 15.4 per cent.

†On \$105,000,000 stock; on \$113,000,000 now outstanding, earnings would be 9.5 per cent.

INDICATOR

of Important Stocks

ent on stock given. Additions and betterments are included in earnings given, wherever distinguishable from the equity of the stockholders and therefore render the stock more valuable. As this magazine is mailed to the Bargain Indicator.

INDUSTRIALS, Etc.

	Present div. rate.	Earnings on par for fiscal year ending on any date during						Earnings on price	
		1906.	1907.	1908.	1909.	1910.	1911.	Present	last
1 American Beet Sugar com.....	0	2.1	1.0	4.2	7.0	7.3	10.9	49	22.2
2 Bethlehem Steel pfd.....	0	5.1	10.8	2.4	5.3	13.4	....	62	21.6
3 Railway Steel Spring com.....	0	8.7	8.6	-1.3	5.3	6.0	....	33	18.2
4 American Agricultural Chem. com.....	0	4.1	6.2	6.1	7.5	10.4	....	59	17.6
5 Virginia-Carolina Chem. com.....	5	4.8	5.9	3.7	7.1	10.4	....	61	17.1
6 Pressed Steel Car com.....	0	17.2	13.3	-5.8	7.7	5.5	....	33	16.7
7 United States Steel com.....	5	14.4	15.7	4.0	10.5	12.3	....	79	15.6
8 Republic Iron & Steel com.....	0	3.8	8.5	2.0	0.7	4.6	....	31	14.8
9 Sears, Roebuck com.....	7	6.6	8.5	4.5	18.4	20.5	....	143	14.3
10 American Steel Foundries.....	5	5.9	14.0	0.3	0.1	6.1	....	43	14.2
11 American Lined pfd.....	0	....	....	....	5.8	4.5	....	32	14.1
12 Colo. Fuel & Iron com.....	0	1.7	0.9	0.4	2.1	4.0*	....	31	12.9
13 U. S. Realty & Improvement.....	5	4.8	6.0	7.7	9.2	9.7	....	77	12.6
14 American Cotton Oil com.....	5	3.8	8.7	3.2	10.4	6.8	....	54	12.6
15 American Car & Foundry com.....	2	4.5	20.1	23.8	2.6	6.6	....	54	12.2
16 American Woolen com.....	0	10.4	3.4	-3.9	10.8	4.0	....	34	11.8
17 International Harvester com.....	5	5.1	6.5	7.8	13.4	14.8	....	128	11.6
18 General Chemical com.....	6	7.3	5.7	4.5	14.4	15.6	....	136	11.5
19 Allis-Chalmers pfd.....	0	-2.4	-2.7	4.2	0.7	3.1	....	29	10.7
20 Westinghouse Electric com.....	0	....	....	....	....	7.6	....	72	10.6
21 Union Bag & Paper pfd.....	4	7.3	7.0	7.4	6.2	5.4	....	53	10.4
22 International Paper pfd.....	2	8.9	7.2	7.3	2.7	4.5	....	46	9.8
23 Laclede Gas com (St. Louis).....	7	6.0	6.5	7.7	9.1	10.0	....	106	9.4
24 Nat. Enam. & Stamping com.....	0	1.7	6.7	-2.1	1.1	1.7	....	18	9.4
25 Amer. Smelting & Refining com.....	4	10.6	12.8	7.0	7.7	7.1	....	77	9.2
26 American Malt Corporation pfd.....	2	2.8	-4.0	10.6	6.2	3.0	....	33	9.1
27 Pittsburgh Coal pfd.....	5	8.1	10.0	1.7	3.0	7.2	....	80	9.0
28 Pacific Coast com.....	6	10.1	10.3	5.7	5.3	8.8	....	99	8.9
29 People's Gas, Light & Coke.....	7	6.9	7.6	8.4	8.9	9.0	....	105	8.6
30 Corn Products pfd.....	5	....	7.2	8.5	8.2	6.9	7.0	82	8.5
31 North American.....	5	3.2	4.7	4.8	6.0	6.2	....	73	8.5
32 U. S. Cast Iron Pipe pfd.....	5	14.0	14.7	5.4	1.2	4.4	....	55	8.0
33 National Lead com.....	3	5.3	6.0	5.8	6.2	4.3	....	54	8.0
34 American Can pfd.....	5	5.1	6.4	6.6	6.7	6.8	....	87	7.8
35 Western Union.....	3	5.9	5.0	1.7	5.8	5.7	....	75	7.6
36 Utah Copper (par \$10).....	30	....	5.9	23.3	29.5	34.6	....	\$47	7.4
37 Pullman.....	8	14.7	11.6	9.8	10.9	11.6	....	161	7.2
38 National Biscuit com.....	7	7.1	7.6	8.1	7.4	7.7	9.8	138	7.1
39 International Steam Pump com.....	0	....	3.7	2.0	1.4	2.8	....	40	7.0
40 General Electric.....	8	13.1	13.7	10.2	10.2	7.4	10.9	160	6.8
41 American Telephone & Telegraph.....	8	8.2	9.0	10.1	9.0	10.0	....	149	6.7
42 Distillers' Securities.....	2	6.4	7.8	1.5	2.2	2.3	....	36	6.4
43 Amalgamated Copper.....	2	5.9	9.2	4.3	2.4	3.9	....	65	6.0
44 Tennessee Copper (par \$25).....	6	16.5	16.0	6.5	6.8	8.9	....	\$37	6.0
45 United States Rubber com.....	0	4.1	4.4	0.2	4.0	7.8	2.2	41	5.4
46 Consolidated Gas (N. Y.).....	6	....	3.9	4.9	6.7	7.4	....	146	5.1
47 Sloss-Sheffield com.....	0	5.3	9.9	4.9	6.6	2.0	....	51	3.9
48 American Locomotive com.....	0	17.7	18.1	11.1	-3.1	1.3	....	38	3.4
49 American Sugar Refining com.....	7	....	12.4	7.5	3.9	3.8	....	119	3.2
50 Central Leather com.....	0	0.4	0.4	1.3	6.3	-2.1	....	28	0
51 Pacific Mail.....	0	1.4	0.7	-2.1	-1.7	-1.1	....	23	0
52 American Hide & Leather pfd.....	0	1.9	2.2	-0.1	11.2	-5.6	....	23	0

*Preferred is \$1,200,000 in arrears; equals 3.5 per cent. on common for one year.

Practical Stock Market Lessons

By Dr. A. L. Bower

II—Analysis of the March and April Markets

THE market in March was comparatively dull, the average daily volumes of Reading being about 40,000 shares, and that of the total market about 250,000 shares. Studies in accumulation and distribution of stocks such as described in my last article were valueless (as far as I could determine) in March. Calculations to determine whether stocks are being accumulated or distributed should not be made when the average daily market volume is less than 300,000 shares.

Traders, financial writers and others expected a "Spring Rise," which is practically a yearly occurrence in March. The rise came, but it was insignificant. Averages rose about 2 points and Union Pacific rose about 7 points. Union Pacific was the leader, which is shown by the Trend Indicator of that stock (numbered "1" on diagram).

This Trend Indicator shows three instances where on three days, March 4, 13 and 18, Union Pacific made higher tops and lower bottoms than on the previous days. The Indicator shows this by the "spreading" out of the upper and lower trend lines. Whenever this "spreading" occurs at the end of a sharp decline, the stock generally rallies, and when it occurs at the end of a sharp rally, the stock generally declines.

The Trend Indicator in my last article shows this "spreading" in Reading on February 7. The highest price Reading touched this year was reached on that day.

On March 10 and 11 the range of Union Pacific was very small. On March 13 a lower bottom was made and also a higher top than on the 11th. Being near the bottom of a decline, this showed good rallying power in the wide range of stocks, and I recognized it as a bullish

sign. The market in general took on a more active appearance on the 13th, and Union Pacific rallied to 176¼ on March 15. The advance in Steel met considerable long stock at 78½, which was shown by the transactions as follows:

2000—78½	3400—78½
1100—78¾	3400—78½
1000—78½	100—78¾
1300—78¾	5600—78½
2000—78½	1500—78½
2600—78½	100—78¾
100—78¾	2900—78½

I knew that the top of the movement in Union Pacific was not reached for the reason that the stock did not have a wide range on March 15. I compared the Trend Indicator at that time with other Trend Indicators showing sharp advances. I found several instances where the advances were about as sharp and with about the same daily range, and found also that in some cases there was a reaction from the trend lasting one or more days, but that in all cases the advances was resumed until a wide range was shown on an advance. At the end of the decline on March 18 the range became wider and the top of the next advance at 177 showed more activity, but the third rally to 178¼ showed the greatest activity and widest range.

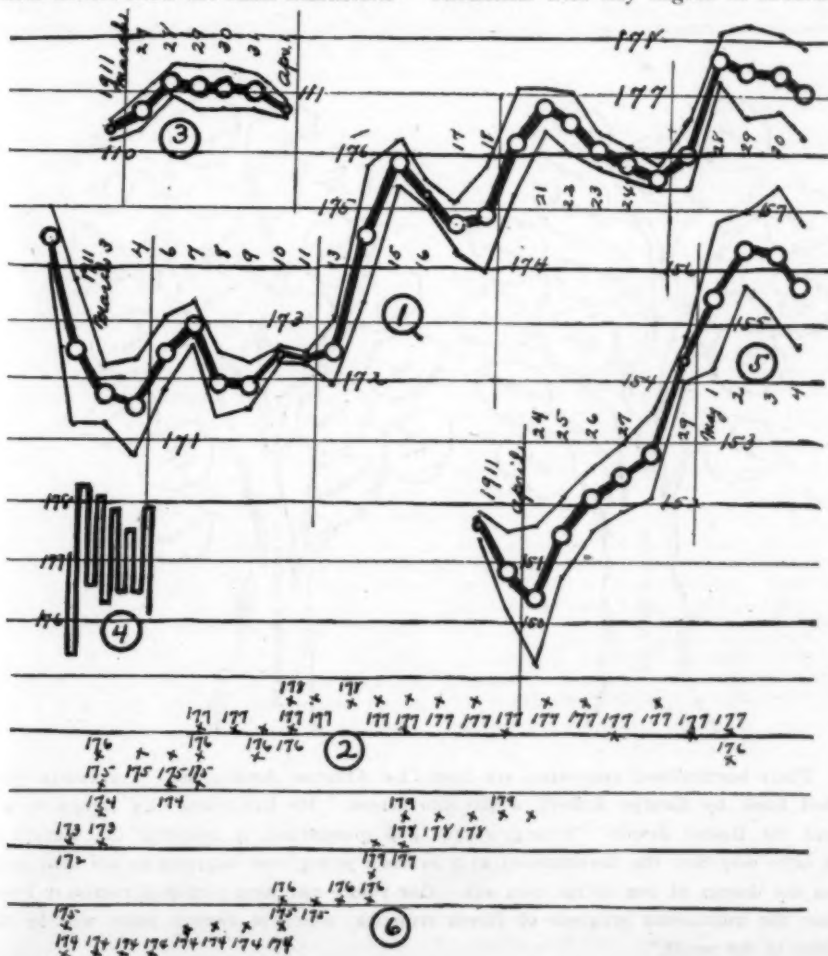
The half-point fractional figure chart (No. 2 on diagram) shows part of the rise in Union Pacific. This chart is similar to chart No. 4, shown in my last article, except that the March market did not make as large steps upward as before. Other stocks did not show these. The culmination of the movement could be detected very easily in the leading stock, Union Pacific. On this last small rally Union Pacific repeated its former top, 178, making a

double top on the figure chart, and then weakened. There were various indications which showed that the market would not advance higher. Chart 3, which is a Trend Indicator of ten rails, and Chart 4, which is a square top line chart of Union Pacific, show activity at the top of the advance. This was shown in various active stocks.

Note the long line of 177 on Chart 2, showing distribution of the stock. Also note the "building down" process—first a double top 178, then a number of x's, then 177's. The decline to 173¼ followed.

It has been stated frequently that charts do not show the same characteris-

tics twice, and that therefore they are of little value. You cannot often find two apples on a large tree which are of exactly the same size, shape, color and weight. Neither can you find two market moves which have the same volumes, turning points, etc. But the slight differences in size, shape, color and weight of the apple do not prevent your recognizing the fruit, neither should the slight differences in market moves mislead the capable student of Stock Exchange transactions all of the time. I must admit, however, that there are times when even an expert market analyst will be unable to judge market conditions with any degree of accuracy.



Points on Averages

Results Obtained by Different Combinations

ACCORDING to Dow-Jones' averages, Monday's (May 1) rise carried 20 active rails to 119.23 within a fraction of the highest of this year, Feb. 7, when they were 119.97.

According to my averages of 7 rails and 3 industrials, based on actual sales—high and low—the high on Feb. 6 was 119.34, and the May 1 average was only up to 114.37, leaving the ten still almost 5 points to show equal recovery with Dow-Jones' family gathering.

I am beginning to wonder what is wrong, if so, with my system—X. Y. Z.

We use the Dow-Jones' averages in *The Market Outlook* and elsewhere, not because we consider them the best possible, but because they are more generally known than any other averages and can be obtained every day in the *Wall Street Journal* without the trouble of figuring them out. They are fairly well adapted to the purpose, but contain quite a number of inactive stocks which undoubtedly would not be used if a new selection of stocks were being made at the present time. These averages run back for many years, and most of the stocks were selected a long time ago.

Any kind of a statistical average is, of course, a mere approximation. The best we can do is to select as many standard, active stocks of a similar character as possible. We think you will get better results by confining your selection to standard railroad stocks instead of including Steel, Copper and Smelting. The principal reason why your averages have not risen as much as the Dow-Jones twenty rails is that your industrial stocks have pulled down the average, having been relatively weaker than the rails since February 6.

In the use of these statistical averages over long periods of time only a rough correspondence can be expected. It must be remembered that each of the companies included in your average is undergoing

constant changes. New bonds may be issued, amount of stock outstanding may be increased, dividend rate may be changed, a big stock dividend may be issued, etc.; hence you will find that according to some tables of averages, stocks went as high in 1909 as in 1906, but according to other averages the top of 1909 was below 1906.

When you use the averages day by day, comparing high and low points over periods of a few weeks or months, you can change the stocks included in the average without any special difficulty. For example, if you are keeping an average of ten standard rails, you may wish to substitute Missouri Pacific, which has recently become more active and seems likely to be more influential in the future, for some one of the ten stocks previously used. You can do this by simply changing the scale of numbers on your chart, so that the new averages will fit on where the old averages leave off, and your high and low points on the chart will not be seriously interfered with, although the figures will be different.

If you follow this plan of making changes in your list of stocks to correspond with changes in the activity and importance of different stocks in the market from time to time, you will need also to keep track of the Dow-Jones averages or some similar compilation with a view to comparing high and low points for a series of years. This is done for you in *THE TICKER* at intervals, so that it is not really necessary to do it yourself.

We doubt if the averages of twelve industrials or any averages of industrial stocks are of very much value, because the different industrial stocks are influenced by such a variety of conditions. An average of Amalgamated Copper and Virginia-Carolina Chemical, for example, would be almost valueless, as the two companies work under such different conditions. For that reason we favor making up your averages from standard railroad stocks only.



The Investment Digest

THIS Digest is prepared from news appearing in the following publications: New York: *Bond Buyer; Financial News; Wall St. Journal; Financial America; Moody's Magazine; Moody's Manual Supplement; Commercial & Fin. Chronicle; Financial Age; Financial World; Railway Age Gazette; U. S. Investor; Commercial; Brooklyn Eagle; Leslie's Weekly; Evening Mail; Evening Post; Herald; Journal of Commerce; Sun; Times; Tribune.* Boston: *News Bureau; Commercial; Financial News; Transcript; Herald; Post.* Chicago: *Record-Herald; Tribune.* Philadelphia: *Financial Bulletin; Railway World; North American; Pittsburg Dispatch; Washington Post; Louisville Courier-Journal; New Orleans Times-Democrat; Baltimore Sun; St. Louis Post-Dispatch; Cincinnati Commercial Tribune; Cleveland Commercial Bulletin; Memphis Commercial Appeal.* Kansas City: *Star; Journal; Dallas News; Houston Post; Seattle Times; Toronto Globe; Montreal Star; Minneapolis Commercial West; Birmingham Age-Herald; San Francisco Journal of Commerce; Denver Post; Atlanta Constitution; London Statist.* Also from the Financial Reviews of leading banking and Stock Exchange houses, too numerous to mention.

The sources of items are indicated as follows: *Leading financial and investment publications. †Banking and Stock Exchange houses. §From official sources. Neither **THE TICKER** nor the above authorities guarantee the information, but it is from sources considered trustworthy. Owing to the vast amount of information condensed into these pages, many abbreviations are necessary.

Atchison.—†Expect. that Co. will earn betw. 10% and 11% on outst. com. st. this fis. yr. are indic. by good showing made in March. In latter mo. Co. added about 1% to its surp. appl. to com. sh. earnings, making nearly 8% earned on this stk. in first 3 quar. of fis. yr. after deducting full yr's. div. on pfd. In the 9 mos. of cur. fis. yr., to end of March, Atch. earned \$1,932,900 gross. incr. \$3,476,800 over corres. mos. 1910, the best prev. yr. in Co's. history. Net earnings. are also the largest Co. ever rep.—§Earnings.—March, gross, \$9,267,521; incr. \$13,070. Net \$2,787,887; incr. \$97,892.—*On June 30, 1910, Co. had \$165,518,500 com. outst. since incr. by conv. of bonds. There is \$114,173,730 pf. outst., and bonded debt totals \$302,004,953. Since Oct., 1909, Atch. has been paying 6% on com. The pfd. has rec. 5% since 1901.

Am. Agri. Chemical.—*Directors have approved purch. of the 2nd most important phosphate lands Co. ever secured. The lands are mostly in Fla. and contain 5,000,000 to 6,000,000 tons phosphate rock, bringing known supplies up to 30,000,000 tons. The Co. has on hand supplies of this all-essential raw mat. sufficient for 200 yrs. The price paid was approx. \$1,500,000 and funds have been taken from cur. resources so that it will involve no new finan. In Jan. last, Co. sold \$4,000,000 first mtg. 5% bonds and proceeds were largely used for paymt. of phos. lands taken over since Oct., 1908, and now has the largest total of phos. of any user in the country.

Am. Beet Sugar.—*For fis. yr. end March 31, Co. earned nearly 11% on its \$15,000,000 com. stk., after paying 6% on pfd. This means a bal. for the com. of \$1,600,000, comp. with \$1,097,253, or 7.31% in the 1910 yr. Early in Jan. it did not appear as if Co.

would earn more than 8% on its com. The recov. in raw sugar prices however, has given Co. the largest profits in its history as well as the largest vol. of gross, sales incrg. 20% over prev. yr. At end of fis. yr. Co. not only had no floating debt, but had a workg. capital of approx. \$2,000,000 comp. with \$400,000 the yr. before, the entire surp. above pfd. divs. having been added to net quick assets. The inaug. of com. divs. at rate of 3% or 4% this fall is likely although it will depend on Congress regarding removal of sugar duty. The entire beet sugar industry is highly protected, and any serious tariff tinkering would seriously jeopardize its future.

Am. Car & Foundry.—*Outside of small orders Co. has taken contracts since first of yr. for 8,880 cars in lots of 100 or over. The largest was St. L. Southw. 2,000; Pitts. Shawmut & Nor. 1,565; Pitts. & Lake E. 1,000, Atch., and C. & O. each 500. Co. earned net to April 30, 1910, \$5,725,098 and had surp. after pfd. div. of \$1,989,478 equal to 6.83% on com. stk. During past yr. oper. have avged. about 85% of cop. against 65% prev. yr. On this basis net for cur. fis. yr. would come to \$6,870,000 a surp. of \$2,404,500, equal to 8% on junior issue. Owing to foresight of directors, holders of com. stk. will not have to worry about divs. for at least a yr., for in 1908 a reserve fund of \$600,000 was set aside for this purpose. As earnings have been large enough to pay divs. out of inc. this remains intact for future use.

Am. Can.—*Rumors of incrd. divs. on pfd. stk. are current. At present there are accrued div. of about 30% due on pfd. stk., say about \$12,370,000. Rep'tives. of Co. state that it is the intention eventually to get this class of stk. on a 7% basis. In report for yr. end. Dec. 31, 1910, net earnings.

after depre. chgs. were \$2,822,927. After div. paymt. there was a surp. of \$761,665.

Allis Chalmers.—*New business in April contin. at about same level as in the two prev. mos., but was approx. 25% below record for same mo. last yr. which, however, was one of the best in history of Co. Oper. avge. around 60% of capacity as against close to 75% at this season last yr. Only few contracts for equipmt. for new projects recd. during past few mos. and little prospect of any improvemt. in that class.

Atlantic Coast Line.—\$Earnings. March gross \$3,290,556, incr. \$154,321. Net \$1,347,040, incr. \$63,919.—*J. P. Morgan & Co. will shortly bring out an issue of \$3,000,000 unified 4% bonds, recently purch. by that firm. The entire auth. amt. of this issue is \$200,000,000, of which \$15,000,000 was outst. prior to this last sale.

Am. Cotton Oil.—*Contrary to expectations Co. decl. regular semi-an. div. of 2½% on com. stk. The present rate has been maint. for two yrs. It is known that Co. did not earn the full 5% rate during past yr., and expectation of a red. had been quite gen.

Am. Hide & Leather.—\$Co. rpts. for quar. end. Mar. 31, net earn. \$219,819; surp. \$54,444. For nine mos. end. March 31, net earn. \$469,867; deficit after chgs., \$26,258.

Am. Locomotive.—†The Co.'s earnings. for some yrs. past, have become larger and larger, as comp. with total val. of locom. prod. of the U. S. and Canada. This is due in part to incr. manuf. of other products, such as steam shovels, auto electric trucks, etc. This has been forced by the poor demand for locom. during 1908 and 1909, and moderate demand during 1910; but the greater variety should put Co. in a stronger position.—*Co. has on its books 2 mos. of business based on cur. rate of prod. The ten plants are now oper. betw. 55% and 60% of capacity, prac. the same ratio that has prev. since Jan. 1. A yr. ago, Co. was running at full capacity and last fall oper. were close to 80%. Co. was fortunate in beginng. cur. fis. yr. now three-quar. finished, with \$17,550,000 orders on hand. The equipmt. Cos. are getting but 35% to 40% of the new orders they should be receivng. at this time. For fis. yr. to June 30, next. Co. will prob. book an aggre. of betw. \$27,000,000 and \$28,000,000 comp. with \$32,203,000 for 1910 yr. The 7% div. on \$25,000,000 stk. is being safely earned, with a fair margin.

Am. Steel Foundries.—*For 8 mos. to March 31, the Co. shows inc., avail. for div. \$166,854. This means that less than 1% has been earned during the time that divs. had been paid at rate of 5% per an.

Am. Sugar Ref.—*Net profits for first 4 mos. of this yr. to May 1, were 40% larger than in same period 1910. This holds out promise of a very much better result for cur. fis. yr. than last, when the 7% com. div. was earned with surp. of hardly \$300,000 to the good.—\$Co. decl. reg. quar. divs. of 1½% on pfd. and com. stks. pay. July 3

to stk. of record June 1st. Resolution for an investig. of Co. has been adopted by Congress.

Am. Smelters Securities.—*Earnings. will show consid. incr. over last yr. when earnings. on the com. were 3.8%. Net for com. divs. for six mos. end. Nov. 30 was at rate of 9.8% for yr., which showing has been maint.—\$Co. decl. regular quar. div. of 1½% on pfd. "A" stk. and 1¼% on pfd. "B" both pay. June 1. Books close May 19, and reopen May 29.

Am. Tel. & Tel.—\$Co. reports for quar. end. Mar. 31, surp. avail. for divs. \$6,834,475, incr. \$10,969.—*For first quar. of cur. fis. yr. gross inc. has been running at rate to indic. total for full 12 mos. \$178,000,000 comp. with \$165,612,000 in 1910. Co. is well assured of gross gain of \$13,000,000 and if business picks up in the fall it is likely that final results for 1911 may run over \$180,000,000. In other words, in 1910 earnings. incrd. 9.4%. This yr. they have been gaining at rate of about 8%. Tel. stations have now passed the 6,000,000 mark, incr. nearly 900,000 stations in the 16 mos. since Dec. 31, 1909. The Bell system today serves a pop. of over 25,000,000 comp. with hardly 10,000,000 in 1905.—*For first time since the tel. was invented, conversation was carried on betw. N. Y. and Denver, Colo., by direct wire, before officials of the Co. and newspaper men. The conversation betw. the two points, 2,011 miles apart, was carried on direct on one wire. The voice of Denver party was heard as plainly as though talk was being carried on betw. two points in N. Y.

Am. Woolen.—\$Stkhldrs. unan. approved res. in favor of retiring \$10,000,000 com. stk.—*Co. has sold to Bankers \$2,000,000 4½% Ayer Mills construct. and equipmt. notes. These notes mature \$1,000,000 March, 1916, and \$1,000,000 March, 1917. The earlier maturity is being offered for public subs. at 95½ and the longer at 95. Notes are guar. principal and int. by Am. Woolen. The sale of \$2,000,000 Ayer notes is to refund a like amt. mat. in June. The Wood Worsted notes were orig. issued to amt. of \$3,500,000. All have now been paid through use of surp. earnings. In addition to \$2,000,000 Ayer notes just ref. Co. has \$2,000,000 other 4½% serial notes outst. mat. \$500,000 in 1913, \$500,000 in 1914, \$1,000,000 in 1915. For next six yrs., therefore, the Ayer mill will be paying from earnings. about 70% of cost of construct. The other 30% has already been paid by Woolen Co. At offering price of the New Ayer notes they yield 5½%.

Baltimore & Ohio.—†March statemt. of earnings. is disappointg. Gross showed a decr. of \$859,400 or 11% from March yr. ago, and net a decr. of \$485,400 or about 18%. Workg. expen. consumed 68% of gross, while in March, 1910, expen. amtd. to but 65.5%. At close of 1910 fis. yr. Co. had a surp. of \$4,357,600 after divs. Subtrctg. the decr. in net the first 3 quars. of

cur. fis. yr., amting. to \$2,600,000, and, also, \$2,100,000 repre. incr. in chgs. on \$40,000,000—4½% notes sold a yr. ago, and \$10,000,000 add. notes sold in Feb. last, it appears that last yr's surp. has been more than eaten up.

Boston & Maine.—\$Earnings. March, gross \$3,579,369, decr. \$43,585; net \$200,906, decr. \$417,603. The quar. div. was reduced today from a 6 to a 4% basis on com. stk. No action was taken on pfd.—*Pres. Mellen says: "Before the beginning of present fis. yr., July 1, 1910, Co. incr. wages of its employees by about \$2,700,000. This is equiv. of more than 6% upon the inc. capital stk.—about \$40,000,000. The reduc. of any maint. expen. was impos. because of condition of the property. If the public will wait patiently until July, when trackage arrangements, that are possible for this yr. will have been largely made effective, and watch the result, they will be amply satisfied. If stkholders will wait patiently, results of a yr's devel. of the New Haven, they will also be, in all prob., more than satisfied."

Brooklyn Rap. Transit.—*A leading street ry. auth. says: "B. R. T. is clearly headed for leadership in N. Y. traction field. Interb. has lost its opportunity to build new subways. April earnings show surprising improvment. over March. For first 3 weeks of April gross receipts incr. \$3,200 per day comp. with but \$1,600 for all March and \$2,400 per day during Feb. April incr. promises to show the largest gain since Jan."

Canadian Pacific.—*An order for 2,000 steel frt. cars has been given to local shops following comple. of 1,500 cars, total order representg. \$3,500,000. The cars are needed because business in the West has reached record propor.—\$Earnings. March, gross \$8,800,640, incr. \$1,004,303; net \$3,156,566, incr. \$445,393.—*Of 3,000,000 acres in its irrigation tract in Alberta, Co. has sold over 1,000,000 acres, or all the land on which it is prepared to deliver water. When the next block of irrigated lands is placed on market price will be not less than \$50 per acre. This comp. with avge. of \$26.59 recd. for 145,000 acres sold in 1910. On the western section which has been disposed of, C. P. expend. \$5,000,000 for irrigation in construct. of 1,600 miles of canals. To qualify for the ready-made-farms, applicants must be agricul., they must be married, and have a certain amt. of capital. There were 1,058 appli. for the 100 farms prepared last yr. This yr. 250 to 300 add. "ready-made-farms" will be prepared.—\$The Co. has decl. the regular quar. div. of 2½%, of which 1¼% was from railway earnings, and ¼ of 1% from proceeds of land sales.

Chesapeake & Ohio.—†The good management, of past, as well as present, together with growth of traffic, have resulted in total earnings large enough to secure much greater econ. of oper., to say nothing of \$20,000,000 put back into property out of earnings during past decade.—†It is officially ann. bankers have purch. \$16,000,000 4½% 3-year notes

of C. & O., part of auth. issue of \$25,000,000. The bankers have already sold entire issue at 99½. Stkhldrs. auth. mtg. covering \$125,000,000 20-yr. bonds.—†Earnings. March gross \$2,574,547, decr. \$312,150; net \$721,486, decr. \$517,223. C. & O.'s div. requirements at present 5% rate amt. to \$3,195,900 per an. In first 3 quars. of yr. Co. earned surp. of \$2,637,100 for divs., so that it must earn bal. over chgs., etc., \$558,787 in last quar. to show divs. for full yr. Even though C. & O. should fail to show surp. over div. requirements this fis. yr. there is no question but that present rate will again be decl.

Chgo. & Alton—Toledo, St. L. & W.—\$Alton. Earnings: March, gross \$1,089,932, decr. \$73,560; net \$362,984, decr. \$5,563. Toledo. Earnings. March, gross \$341,089, decr. \$5,390; net \$77,057, decr. \$20,420.—*Clover Leaf has \$425,000 less inc. for divs. to March 31 than it had a yr. ago, and Alton about \$1,000,000 less. The "other inc." acc. of the one has been paid down \$275,000, and that of the other \$340,000. Total gross of Clover Leaf has incr'd. \$3,000 over the 9 mos. in 1910 and Alton's has dropped \$700,000.

Chgo., Burl. & Quincy.—\$Co. repts. to Inter. Com. Comm. earnings. March, gross \$6,863,026, decr. \$1,047,749; net \$2,121,882, decr. \$5,390; net \$77,057, decr. \$20,420.—*

Chgo. Great Western.—†The reorg. Co. is showing good results from large expend. for improvment. of property, and is one of few roads making steady gains in earnings. The bonded debt having been reduced, fixed chgs. are earned with a large margin, but on acct. of heavy capital, prob. not more than 2% will be shown for the \$41,000,000 4% pfd. stk. The pfd. will contin. non-cumu. for 3 yrs. more.—\$Earnings. March, gross \$1,070,865, decr. \$79,397; net \$287,786, incr. \$4,077.

Chgo., Mil. & St. Paul.—†In 8 mos. to end of Feb., Co. failed to earn its divs. for the period by more than \$2,750,000, and it is likely that in March this def. was incr'd., and it should not be surprising if St. P. does not earn more than 5% on com. stk. this fis. yr. It does not follow, however, that a red. in div. rate will be ordered. It is said on good auth. that if earnings, at time of meeting show an upward tendency, and business and crop prospects are satis., the reg. 7% rate will be decl. In first 3 quar. of cur. fis. yr. the Co. failed to earn its divs. for the period by \$2,627,300. Earnings for March showed a decr. of \$555,200 or 9% in gross, and a decr. of \$536,500 or 25.7% in net. This comp. with a yr. ago is more unfav. than in Feb., in which mo. gross showed a decr. of but \$50,600 and net a decr. of \$239,500. However, earnings for March is comp. with one of the best mos. in St. P.'s history.—†The Puget Sound Ry. reports for March: Oper. inc. \$625,571, incr. \$183,035; from July 1 to March 31, oper. rev. \$10,950,185, expen., taxes, etc., \$6,506,595, oper. inc. \$4,443,590.—*Chgo., Mil. & Puget

Sound is planning to issue \$25,000,000 more of its 4% first mtg. bonds to St. P. in repayment for advances. On June 30 last there were outst. \$123,000,000 Puget Sound bonds, all of which were in treas. of St. P. Since then amt. has been incrd. to over \$130,000,000, and St. P. has sold \$25,000,000 out of its treas.

Chgo. & Northwestern.—†The \$7,500,000 Gen. Mtg. 4% Gold bonds, due 1987, have all been disposed of by bankers.

Colorado & Southern.—§Earnings. March, gross \$1,115,314, decr. \$302,013; net \$285,221, decr. \$134,202; surp. \$78,558, decr. \$109,199.

Consolidated Gas.—†Cur. earnings. are underst. to be ahead of all prev. records. In last fis. yr. Co. earned surp. equal to 7.43% on cap. stk.; but expended \$8,400,000 for additions and betterments, etc., and if this amt. be incl. in Co.'s earnings for divs., approx. 16% was earned on capital stk. in last fis. yr.—§Co. has decl. the regular quar. div. of 1½%, pay. June 15 to stk. of record May 17.

Crucible Steel.—*Chairman of Co. says treasurer's report shows oper. profits for March of \$355,722, or at rate of 16% per an. on pfd. stk. The amt. is only \$12,500 less than March last yr.

Denver & Rio Grande.—†In the 9 mos. to end of March Co. earned surp. of \$1,750,000 for divs., equal to over 3½% on \$49,779,000 pfd. stk. outst. In corres. period of prev. fis. yr. Co. earned bal. of \$1,908,000 for divs. or 3.8% on pfd. stk., but in the inc. acct. for first 9 mos. of 1910 fis. yr. there was incl. \$864,600, repre. uncoll. int. on Western Pac. bonds. The actual inc. in surp. earnings this fis. yr., therefore, amts. to approx. \$706,000 or more than 67%. Div. requirements, at present 5% rate, call for \$2,488,000. It will be necessary for Co. to show surp. of \$738,000 in cur. quar. to earn div. for full yr. Earnings. March, gross \$1,687,225, decr. \$268,734; net \$358,575, decr. \$243,110.

Distillers.—†Estimates place earnings. at rate of about 4% on com. stk., but we are informed that they are much better, although for fis. yr. to end June 30th net for the com. may not show over 4% as against 2% now paid on outst. \$31,000,000 common. Prosperity of Co. is largely attrib. to low price of corn. Co. is deriving just as much for its manuf. prod. as when corn sold 20c. per bu. higher, but Co. had a subst. debt and many holes to fill with present excellent earnings. It is fast getting in shape, both physically and finan., and this means inc. divs.

Equipment, &c.—*Recent orders placed for 2,000 cars and 33 engines. All except three locom. were ordered by Chgo. & Northw. from Am. Locom. Co. The above comp. with 14 cars and 9 locom. ordered the prev. week and 220 cars and five engines two weeks ago. At present carriers are in market for 4,505 cars and 176 locom. The

most import. devel. has been call for bids for about 80,000 tons of steel by the Inter. Rap. Tran. for exten. and widening Second, Third and Ninth av. elev. lines. This makes a total of over 250,000 tons involved in 3 trans.—*The Pitts. and Lake Erie has placed order for 2,000 all-steel car, at cost of \$2,000,000, with Pressed Steel Car and Car and Foundry Co. In const. there will be required 24,000 tons steel plates and shapes, besides 16,000 car wheels and 2,000 sets of air-brakes. It is said to be one of the largest orders placed for R.R. equipment this season.

Erie.—†In 8 mos. of cur. fis. yr. to end of Feb., Co.'s net amt. to \$10,419,800, incr. of \$311,500, or more than 3% over corres. mos. of last yr. Making conserv. est. of other inc. and chgs., it appears that Erie earned surp. of nearly \$4,000,000 for divs., or after allowing full yr's. div. on both first and second pfd. at rate of 4%, there remained bal. equal to 1.28% on \$112,378,900 com. stk. As 4 mos. of cur. fis. yr. are yet to be heard from, it is, of course, imposs. to make an accurate forecast for full yr., but it would seem that unless business shows slackening 5% should be earned on com. stk. in full yr.—§Earnings. March, gross \$4,640,863, decr. \$177,833; net \$1,361,282, decr. \$218,751.

General Chemical.—*The an. report for yr. end. Dec. 31, 1910, showed net earnings. \$2,401,339, incr. \$300,000 over prev. yr. This amt., after allowing for 6% divs. on pfd. stk., showed 20.25% earned on \$8,151,300 com. comp. with 19.36% earned on \$7,410,300 com. in 1909. In Jan. of cur. yr. Co. incr. com. div. from 5% to 6%, same percent. as pfd.—§The directors have decl. regular quar. div. of 1½% on com. stk., payable June 1 to holders of record May 20.

General Electric.—§Co. rpts. for yr. end. Dec. 31 last total earnings. \$74,707,689, incr. \$20,605,637; net \$10,855,692, incr. \$4,362,021; surp. after divs. \$5,641,324; incr. \$4,362,005; total surp. \$23,022,706, incr. \$5,641,324. Arrangements for conv. of \$12,875,000 5% 10-yr. Gold Deb. bonds of 1907 into stk. have been made. Bonds are conv. at par after June 1 next.—§Co. dec. reg. quar. div. of 2%, pay July 15th to stk. of record May 31st.—*Co. had at close of yr. largest workg. capital with one exception in its history and one of the largest bodies of quick assets of any Am. corp. Total fig. \$61,176,080 or \$93 per share are shown, while cur. liab. did not greatly exceed \$4,500,000.

Great Northern.—*G. N.'s loss in traffic April amt. to \$803,096, or 15%. This incr. gross loss for fis. yr. to \$2,571,086. For 12 mos. total gross decr. will prob. be betw. \$3,250,000 and \$3,500,000. Even so, Mr. Hill expects to show better than 9% earned on his stk.—†It is learned on excel. auth. that the Steel Corp. will take approx. 5,000,000 tons of ore out of G. N. iron ore lands within the next few mos. G. N. Ry. has contract with the Steel Corp. for carrying

this ore, and rec. 80 cents per ton. Therefore G. N. will be benefited \$4,000,000 within next few mos.

Great Northern Ore.—†For 1911 and 1912 a min. total of about \$4.50 per sh. on its certifi. will be recd. by the Trust under lease to Steel Corp., and prob. an equal amt. from other leases. With \$3 per sh. already on hand, there will be about \$12 per sh. avail. for div. in 1911 and 1912 if Steel Corp. mines its full tonnage. This comp. with total of only \$4.50 per sh. distrib. in divs. over past 4 yrs. It appears that larger returns on Ore Certif. is in view.

Harriman Lines.—†Earnings. for March, make a much better comp. with a yr. ago than in Feb. In latter mo. gross earnings. of So. Pac. showed decr. of \$490,300 and net a decr. of \$522,900. Union Pac.'s gross in Feb. fell off \$699,000, as comp. with corres. mo. of a yr. ago, while net showed a decr. of \$704,000.—§U. P. earnings. March, gross \$6,457,999, decr. \$684,798; net \$2,140,936, decr. \$346,491; S. P. earnings. March, gross \$10,658,024, decr. \$325,249; net \$2,934, decr. \$487,003.—§U. P. dec. reg. quar. div. of 2½% on com. stk., pa. July 1 to stk. of record June 3rd; S. P. dec. reg. quar. div. of 1½% pay. July 1 to holders of warrants of that date.—†Federal Judge Wolvorton has rendered decision req. So. Pac. and Oregon & Cal. Ry. Co. to forfeit to the U. S. about 2,000,000 acres of land est. to be worth somewhere betw. \$40,000,000 and \$75,000,000. The case will be appealed.

Hocking Valley.—§Earnings. March, gross \$452,751, decr. \$295,557; net \$86,939, decr. \$213,645.

Illinois Central.—§Earnings. March, gross \$5,107,524, decr. \$431,429; net \$1,131,569, decr. \$545,133.

Interborough.—*The \$10,000,000 4½% one-yr. notes were sold within two hours after being offered. The price was 100¾, to yield a trifle over 4%. Banks were prac. the sole buyers, and demand was so keen that \$30,000,000 notes could have been sold. The proceeds will ref. \$4,584,000 6% notes mat. May 1. This leaves bal. of \$5,500,000, of which over \$1,000,000 will be req. to pay off floating debt incurred in various prop. repairs and add. during last 12 mos. The bal. is really anticipatory to elevated exten. With 80,000 to 90,000 tons of steel to pay for in near future, Co. can conveniently use half the amt. of cash above refg. for this alone.—§Co. rpts. March, gross \$2,742,785, incr. \$64,569; net inc. \$592,813, decr. \$97,018. Def. after divs. \$194,687, decr. \$97,018.—§Inter. Met. rpts. for quar. end. March 31, 1911: Surp., Dec. 31, 1910, \$793,818; div at 2½% on 339,128 shs. of Inter. Rap. Tran. for quar., \$763,038; int. on bank bal. and loans, \$83,664; total receipts, \$1,640,520; total disbursemts., \$919,594; surp., \$720,927.—*Gross receipts of Inter. Rap. Tran. for April incd. \$3,109 per day, comp. with gain of \$2,000 per day in March, a Feb. incr. of \$3,280 and a Jan. gain of \$2,285 per day. For

first 10 mos. of cur. fis. yr. Inter. Rap. Tran. has gained \$682,000 gross, but twice this sum has been lost in net, a reflection of incr. oper. costs and expend. for new const.

Int. Agri. Corp.—*The \$12,000,000 add. stk., half pfd. and half com., auth. by Co. will be used to prov. for future expan. of business. For fis. yr. to end June 30 next it is reliably est. that earnings. will amt. to \$1,800,000, which, would repre. 77% incr. over \$1,017,000 earned in last fis. period. June 30 there was outst. \$16,052,000 of stock since incrd. to about \$20,300,000. Deductg. divs. of \$780,000 on \$11,143,000 pfd., a net of \$1,800,000 leaves \$1,020,000 for com. divs., or about 11% on \$9,000,000 stk. The community has long been accustomed to asso. but two Cos. with the fertilizer industry—Am. Agri. and Va.-Caro. The Inter. Co., however, has been pushing forward and is now recognized as the third member of the trio which betw. them handle 45 to 50% of business of the country.

Int. & Great Northern.—§The comm. repre. mtg. bonds ann. that all bonds and coupons deposited under the agreem. having been sold by the comm. at their face val. and accrued int., notice is given that the bal. remaing. will be distrib. All third mtg. bondholders who have not yet deposited their bonds with comm., but wish to participate in reorg. plan, must deposit bonds with Equitable Trust Co. on or before June 1, and pay cash at rate of \$25 per each \$1,000 bond. No deposits will be rec. after June 1.—†The synd. of bankers who recently purch. \$11,000,000 3-yr. 5% notes have resold entire issue.

Int. Harvester.—§Co. rpts. for yr. end. Dec. 31st last, total sales \$101,166,359, incr. \$14,551,810; net prof. \$16,084,819, incr. \$1,192,079. After deductg. pfd. divs. bal. equals 14.85% on com. stk. comp. with 13.36% earned in prev. yr. Co. dec. reg. quar. pfd. div. of 1½% pay. June 1 to stk. of record May 10th.—†Prest. Silas McCormick stated that all reports rec. on condition of the crop are most favor. and outlook for agricul. welfare seems very promising. The incr. in domestic trade during yr. was equal to 12.8%, and foreign trade 21.5%.

Int. Steam Pump.—†Co. is one of the few indust. that has not experienced adverse effect of gen. depression in business. Co. is oper. at 88% or 90% of cap., and outlook for next few mos. is quite encouraging. In 9 mos. of fis. yr. to end of Dec. Co. earned a full yr's 6% div. with bal. of \$530,000 to spare. This bal. was equal to 3.1% on outst. com. stk., whereas in entire 1910 yr., but 2.77% was earned on com. and in 1909 yr. 1.44%. Workg. capital has been strengthened, and on Dec. 31st last cur. assets exceeded cur. liab. by approx. \$11,250,000.—§Co. rpts. for yr. end. Mar. 31, 1911, net oper. profits \$2,464,420, incr. \$358,746.

Iowa Central.—*In March gross earnings. were prac. same as a yr. ago, \$329,000, but

oper. expen. were so reduced that net after taxes was \$99,000 against \$88,000 last yr. Its gross for the nine mos. period were \$2,696,848 comp. with \$2,576,657 in 1909-10.

Kansas City Southern.—\$Earnings. March gross \$840,103, decr. \$3,724; net \$276,582, incr. \$8,888.

Laclede Gas.—†Cur. earnings are making favor. comp. with yr. ago. In first quar. to March 31st, Co. earned 3.02% on \$9,500,000 com. stk., compared with 2.65% on \$8,500,000 com. in corres. mos. of 1910. Gross for 3 mos. amtd. to \$1,177,378, an incr. of \$8,229 over same mos. of 1910. Oper. expen. showed decr. of more than 7%, so that net incr'd. \$53,465, or more than 9%. Bal. sheet as of March 31st gives cur. assets \$1,579,962 and cur. liab. \$567,961.—\$Co. has decl. usual quar. div. of 1% on com., and the usual semi-an. div. of 2½% on pfd. stk., payable June 15 to stk. of record June 1.

Lehigh Valley.—\$Earnings. March, gross \$3,045,616, decr. \$8,210; net \$1,024,597, decr. \$81,843.—†Statemt. for 9 mos. to end of March indic. that earnings for fis. yr. to end June 30th will be smaller than in 1910. In first three quars. of fis. yr. net returns from R.R. oper. alone amtd. to \$8,527,000. Making careful est. of "other inc." and chgs, surp. earnings from R.R. oper. in 9 mos. to end of March amtd. to approx. 8%, or at rate of 10¼% for full yr.

Louisville & Nashville.—*J. P. Morgan & Co. have purch. \$10,000,000 4% bonds of the Louisv. & Nash. R.R. Co. These bonds are part of an auth. issue of \$50,000,000 which mat. in May, 1955.—\$Earnings. March, gross \$4,874,674, incr. \$84,144; net \$1,451,551, incr. \$19,919.—*Although in first 9 mos. of this fis. yr. earned only \$11,364,088, which is about \$2,000,000 less than in the same mos. of pre. yr., the 7% div. is perfectly safe. In last fis. yr. 17.39% was earned, while this yr. about 14%, or twice amt. of the div., will be earned. L. & N. placed order for 14,000 tons of rails, deliv. in Sept.

Minn. & St. Louis.—\$Earnings. Mar., gross \$447,450, incr. \$33,022; net \$158,669, incr. \$32,821.—*9 mos.'s gross was \$3,989,309 against \$3,724,126, a gain of \$265,184, or 7.12% over yr. prev., and net after taxes was \$1,080,197 comp. with \$1,046,399, an incr. of \$33,798 or 3.23%. On acct. of decr. in other inc., gain in total inc. avail. for chgs. was \$17,910, or 1.55%. Chgs. for period were \$1,054,667, incr. \$30,557 over yr. ago, which is suf. to wipe out gain in total inc. and make surp. \$117,705 a loss of \$12,646, or 9.70%. The surp. indic. earnings of about \$157,000 for the \$3,960,900 outst. pfd. stk. this yr., or about \$28,000 short of amt. formerly req. for divs. when 5% a yr. was being paid.

Minn., St. Paul & S. S. Marie.—\$Earnings. March, gross \$728,031, decr. \$140,885; net \$125,914, decr. \$188,238.

Missouri, Kan. & Texas.—\$Co. applied to Kan. R.R. Comm. for auth. to issue \$107,-

000,000 bonds. Of these \$82,000,000 will take up outst. debts and \$25,000,000 for improvements. Earnings. March, gross \$2,241,058, incr. \$20,703; net \$385,649, decr. \$5,601.

Missouri Pacific.—†The avge. ratio of selling price to earn. power past five yrs. was 13.37, and according to earnings of last yr., would make stk. worth \$44.25. Taking into consid. both earn. power and assets, the present val. may be fairly est. at about \$55.—*Co. will not endeavor to raise money needed in one lump sum, but will offer a moderate loan so as to supply not more than \$10,000,000 for improvements. per an. The finan. requiremts. are computed at not more than \$10,000,000 each yr. for next ten yrs. To obtain this amt. is regarded by bankers as a matter of no difficulty.—\$Earnings. March, gross \$4,341,752, decr. \$499,117; net \$1,209,616, decr. \$246,250.

National Biscuit.—*The sales for past yr. were \$45,340,232, incr. as comp. with prev. yr. of \$2,619,688. Net profits were \$4,619,460, or at ratio of 10.19% of gross. Earnings for 1910 were equiv. to 18.62% on pfd. and 9.86% on com. Co. had no bonded or other indebted. at close of last fis. yr. save about \$520,000 cur. accts. for raw mat. and supplies.—\$Co. decl. reg. quar. divs. of 1¼% on pfd. and 1¼% on the com. stk. Pfd. is pay. May 31 to stk. of record May 17. Com. is pay. July 15 to stk. of record June 28.

National Lead.—*Co.'s workg. capital as of Dec. 31 last was \$10,905,496, a decr. of \$661,953, as comp. with 1909. During last yr., however, \$191,238 was added to plant investmt. and \$536,968 to other investmts. The profit and loss surp. gained \$66,254, bringing total to \$4,779,627.—\$Co. dec. reg. quar. pfd. div. of 1¼% pay. June 15th.

New Haven—N. Y. Central.—†A prom. auth. on R.R. matters says: "The relations of N. Y., N. H. & H. to the Penn. and N. Y. C. have long been a subject of spec. They are especially worth watching now. There have recently been 3 progressive steps in N. Y. Cen.-New Haven affiliation. The two Cos. have joined forces in equal ownership and control of the Rutland R.R.; they have arranged for N. H. train service on subsid. lines of the Boston & Albany; and now comes the announcement that the N. H. is to withdraw 3 of its heavy pass. trains each way betw. N. Y., Portland and Bar Harbor from the New London-Worcester route and shift them to the B. & A. route via Springfield and Worcester—the N. H. thus surrendering its own long haul for the benefit of B. & A., which is leased by the N. Y. Cen. and has of late yrs. been burdened by a deficit. As to Penn., ground breaking has begun for the line connectg. with the New Haven via Hell Gate and its pros. big bridge, a plan presumably not viewed by N. Y. Cen. with satis. We may also note the repre. of the two other Cos. in New Haven's directorate, and consid. direct and indirect holdings by them

of its shares. While gen. tendencies have been toward equalization of N. Y. Cen.-Penn. relations with the New Haven in recent affil. N. Y. Cen. is visibly ahead."

N. Y. Central.—*Co. reported decr. in gross \$959,439 for March. Oper. expen. and taxes decr. \$377,164, so that net oper. rev. showed a shrinkage of \$582,275. For 9 mos. end. March 31, net oper. rev. shows shrinkage of \$4,185,177.—*Vanderbilt roads, as a whole, have opened new yr. rather poorly. Total net for all lines for first quar. of 1911 decr. 29% from 1910 figures. Gross showed but slight decline. Net for first 3 mos. \$10,268,701, with gross of \$58,562,779, comp. with net \$11,189,151 in 1909 with gross of but \$50,103,515. In other words, the roads in 1909, with gross \$8,459,264 smaller than in 1911, were \$920,450 better off as regards profit. Oper. expen. in these 3 mos. contin. to incr. out of all propor. to adv. in gross. Of all Vanderbilt roads N. Y. Cen. has fared best. Its net for quar. decrd. but slightly over 7% from 1910. Gross adv. slightly.

N. Y., New Haven & Hart.—\$N. H. sold \$12,300,000 4% 50-yr. Cent. New Eng. Bonds which will soon be offered for subscrip. Earnings March, gross \$4,919,827, decr. \$51,100; net \$1,293,966, decr. \$186,396. Co. rpts. for quar. end. March 31, gross \$13,880,321, incr. \$166,517; net \$3,492,269, decr. \$141,998. Pres. Mellen says: "There is no basis for rumor that reduction in div. is pending. In view of steadily increasg. burdens which are being heaped upon us and obstructive legisla. which is harassing development of R.R. prop., it is not surprising that holders of shares in gen. should be tempted in sheer disgust to liq. such investmts. in favor of securities which are not subj. to all sorts of hostile and restrictive legisla. Our earnings are not as satis. as we should like, but our 9 mos.' statemt. shows that, even incl. the winter mos., which contrib. but little toward our div., we have earned our full propor. of the 8% div. I can say emphatically that, for 12 mos. to end June 30, the rev. of New Haven system will show within a very small fraction of 8% on our stk. All rumors that any red. in div. rate is even a poss. are but vaporing of a disordered mind." (See Boston & Maine.)

N. Y., Ontario & Western.—\$Earnings March gross \$744,783, incr. \$24,182; net \$141,664, decr. \$61,026.

Norfolk & Western.—*Gross decr. in March earnings was \$269,000, or about 11%. Loss in oper. rev. amtcd. to \$296,256. Gross earnings comp. with one of the largest mos. in Co.'s history, when there was a heavy movement of coal westbound.—†In 9 mos. end. March 31st, Co. earned surp. after chgs. and taxes \$6,109,700, after ded. full yr's. 4% div. on pfd., leaves a bal of \$5,190,000 for com., equal to 7.45% on the \$69,622,000 stk. outst. Com. stk. now rec. 5% divs. so that bal. is \$1,708,000 in exc. of full yr's. req. In the corres. 9 mos. of 1910

Co. earned \$5,928,000 for com., equal to 8.5%.—\$Co. decl. reg. quar. div. of 1¼% on com. stk. pay. June 19th to stk. of record May 31st.

North American.—\$Co. decl. reg. quar. div. of 1¼% pay. July 1 to stk. of record June 15th.

Northern Pacific.—*Owing to heavy losses thus far in cur. fis. period Co. will earn about 8% on its \$248,000,000 stk. during 12 mos. to end June 30. Last yr. Co. earned nearly 9%, there being a surp. over all chgs. and 7% divs. of almost \$5,000,000. Gross this yr. will doubtless total \$67,000,000; net should be about \$22,800,000 and bal. for divs. \$20,200,000. Last yr. gross was largest on record, being some \$74,500,000. Net in 1910, however, were several millions behind number of prev. yrs. In March Co. showed incr. in gross about \$105,000, while net was greater by about \$103,000. In other words, it handled a largely incrd. business in March this yr. at about same oper. cost as yr. ago. For 9 mos. ended March 31 gain in gross was \$1,000,000 nearly all saved for incr. in net as comp. with like period of prev. yr.

Pacific Coast.—Co. reports March gross \$539,835, decr. \$36,012; net \$28,963, decr. \$74,136.—*Co. will almost certainly decl. the reg. divs. in July, 1¼% on \$1,525,000 first pfd., and 1½% on both the \$4,000,000 second pfd. and \$7,000,000 com. The July div. is paid out of earnings for fis. yr. end. June 30. It will make aggre. for yr. 5% on first pfd. and 7% on the other two classes. Co.'s net for 9 mos. will be about \$1,000,000. Int. on funded debt for full yr. is \$250,000, being 5% on \$5,000,000 first mtg. bonds. The yr's. div. requiremts. at the above rate are \$76,250 for first pfd. and \$770,000 for the \$11,000,000 other stk. at 7%. Total fixed chgs. and div. requiremts. \$1,020,000, so that net for 9 mos. will take care of chgs. and full yr's. paymts. on stk.

Pennsylvania.—*The amt. of new allotmt. of stk. will approx. \$41,261,700, bringing total amt. of stk. outst. after allotmt. up to \$453,871,700. Div. requiremts. will be incrd. \$2,475,700 per an. In fis. yr. end. Dec. 31st. Co. earned bal for divs. amtng to \$35,159,000. This bal. is equal to 7.74% on \$453,871,700, amt. outst. after new allotmt. Holders will rec. int. at rate of 36 cents per sh. a mo. for 3 mos., or from time first paymt. May 31st, until Aug. 31st when last paymt. must be made. These int. chgs. will amt. to approx. \$443,400. After Aug. 31st new stk. will begin to draw divs. Co. will make but one div. paymt. on new stk. this fis. yr.—that of Nov. Divs. on new stk. this fis. yr. at 6% will, amt. to but \$618,900, making total \$1,062,300. An. div. req. on stk. now outst. \$24,756,600. New int. and div. req. will bring amt. up to \$25,818,900. As Co. earned bal. for divs. \$35,159,000 in last fis. yr., surp. this yr. will have to decr. over \$9,000,000 in order to fall short of req.—*Co. placed order with Altoona shops for 77 locom. and 81 steel cars.

Order is one of largest given in several mos.—**R. R. earnings.** March, gross \$18,063,654, decr. \$950,610; net \$3,766,426, decr. \$764,252. Co. has decl. reg. quar. div. of 1½%, pay. May 31, to stk of record May 5.—**It** is officially stated that 40,000 frt. cars are idle. This represents over 15% of all cars owned east and west of Pitts. Normally Co. has about 5% in bad order. A frt. car earns about \$2 per day. This would mean a loss of approx. \$2,000,000 per mo. in gross on 40,000 cars. A frt. car will earn in 18 mos. enough to pay its cost.

Pere Marquette.—This road has the highest oper. cost of any large R. R. in the U. S., for in Feb. it took 97½% of gross to oper. it, while in March the ratio was 83½%, and 8 mos. of fis. yr. the road showed a def. after chgs. of \$1,317,000 and yet the 6% bonds sold for 99¾, the pfd. stk. for 44, and the com. for 20. Of the \$8,000,000 notes recently sold, \$5,000,000 were for refundg. pur., and \$3,300,000 will be expended in prov. 50 new locom., other equipmt. improvng. term. facil., etc. Under management of Mr. Cotter, who has been relieved of his dual duties as Pres. of both the C. H. & D. and the P. M., the R. R. is already showing evidences of "growing pains." This system has a gross business of \$17,000,000 per an., and if with incr. equipmt. and imp. facil. the road could be oper. for 72% of gross, it would mean net \$1,760,000 above fixed chgs., and this would allow div. on the \$12,000,000 pfd. stk. for it only requ. \$480,000 to pay 4% on this issue. We hear that future of this prop. lies in its acquis, by some other large system.

Pressed Steel Car.—Co. decl. regular quar. div. of 1¼% on pfd. stk., pay. May 24. Books close May 3, reopen May 24. (See "Equipment" and "Seaboard.")

Pullman.—Co. has decl. usual quar. div. of \$2 a share pay. May 15, to holders of record April 29.

Republic Steel.—Co. decl. reg. quar. div. of 1¼% on pfd. stk. pay. July 1 to stk. of record June 16th.

Reading.—Phil. & Reading Co. auth. incr. of \$20,000,000 in its stk., the purpose is to reimburse Reading Co. for expend. in retiring about 20,000,000 mat. Phil. & Reading bonds a few weeks ago. Reading Co. issued in place of mat. bonds its own gen. mtg. bonds and hence is to receive an equiv. amt. of stk., of which it is sole owner.—The refundg. effected a saving of more than \$700,000 per an.—Co. reports March gross \$3,802,187; incr. \$138,519. Net \$1,332,736, decr. \$92,260. Reading System, Mar. net \$1,486,823, incr. \$40,090. Surp. \$601,823, incr. \$55,601.—Reading's 9 mos. com. stk. bal. was approx. \$3,260,000, or 4.6% against \$4,480,000, or 6.4% last yr. On this basis, the best that can be fig. for complete yr., presupposing last quar. will be as good as 1910, is about 7.3%, which would match against earnings of 12.3% last yr.

Rock Island.—While gross earnings of

Chgo., R. I. & Pac. in March showed loss of \$93,223, or 1.7%, from 1910, the poorest comp. showing for any mo. yet reported during cur. fis. period, net oper. inc. gained \$324,775, or 37.4%, making total incr. for 9 mos. end. March \$695,283, or approx. 5.8%. The favor. showing resulted from a reduction of \$377,079 in oper. costs and a decr. of \$33,501 in taxes. Rock Isl.'s traffic fig. for April showed an adv. over last yr. of about 2½%. Substan. gains in net may be looked for. Bal. avail. for div. at end of last fis. period was \$4,747,881, or about 6.33%. It is not prob., however, that surp. after divs. will be suff. to justify an early resump. of divs. on the pfd.

Rutland.—R. R. reports earnings. March gross \$252,857, decr. \$5,843; net \$39,039, decr. \$19,613.

Seaboard Air Line.—It is understood that fully \$15,000,000 of the \$19,000,000 bonds have already been distrib. to investors. 3 ins. Cos. took \$2,500,000 to \$3,000,000 bonds. This sale prac. compl. reorg. of road.—The \$10,000,000 ref. coll. trust 5% gold bonds which mature May 1, will be paid off. The \$4,651,000 mtg. and coll. trust 5% 3-yr. gold bonds (extended) which mature May 1, will be paid. During 8 mos. end. Feb. 28 last Co. scored imp. in gross of more than \$1,100,000, and rise in net about \$157,000, comp. with the corres. period of prev. yr.—**Earnings.** March gross \$2,253,820, incr. \$218,545; net \$812,157, incr. \$98,035. Seaboard has closed contracts for 1,239 cars, incl. 1,000 steel box cars, which will be built by Pressed Steel Car Co.; 200 steel cars and 30 cabooses, by the Western Steel Car & F. Co.

Sears Roebuck Co.—Co. decl. reg. quar. com. div. of 1¼%, pay. May 15, to stk. of rec. Apr. 29th.

Southern Railway.—In 9 mos. from July 1, 1906, to April 1, 1907, gross totaled \$42,545,254. In first 9 mos. of cur. yr. gross was \$46,101,599, an incr. of \$3,647,349 over 4 yrs. ago.—Co. repts. Mar. gross \$5,349,517, incr. \$195,872; net \$1,523,320, incr. \$42,117. In 8 mos. to end of Feb. Co. shows an incr. of \$2,570,000 or 7% in gross, while net in same period incr'd. \$395,700, the largest Co. has recorded. In 1910 fis. yr. Co. earned bal. of \$5,704,000 for divs., equal to 9½% on the \$60,000,000 pfd. Surp. earnings. this fis. yr. are running over 30% ahead of yr. ago, and present pros. are that this fis. yr. will approx. \$7,500,000, equal to 12½% on pfd.

St. Louis & San Fran.—Co. has called for paymt. Aug. 1, 1911, \$4,000,000 4½% notes, payable Feb. 1, 1912. These 7 yr. gold notes, dated Feb. 1, 1905, are redeemable at par on any int. day on 90 days notice. Funds for paymt were prov. by recent sale of gen. lien 15-20 5% gold bonds of \$7,000,000, which also ref. \$1,443,000 equipmt. notes and prov. \$1,557,000 for addi. and bettermts.—Co. gross during April incr. over \$9,000 a day, and est. total for mo.

is \$275,000 incr. over same mo. last yr. Incr. is due prin. to fact that coal business this yr. is normal, while last yr. the coal strike was on.—§R. R. reports March gross \$3,691,232, decr. \$25,671; net \$1,321,403, decr. \$63,048.

St. Louis Southwestern.—Earnings. March gross \$92,495, incr. \$42,513, net \$195,369, incr. \$36,355.

Underwood Typewriter.—§Co. decl. an initial div. on 1% on com. stk. pay. July 1st to stk. of record June 20, also reg. quar. div. of 1% on pfd. pay. at same time.

U. S. Rubber.—§U. S. Rubber rpts. for yr. end. March 31, gross sales \$54,751,939, decr. \$1,543,078; net inc. \$6,597,689, decr. \$1,422,133. Bal. avail. for com. divs. \$549,825, equal to 2.20% on com. stk. as comp. with 7.84% earned in prev. yr.

U. S. Steel.—§Co. decl. reg. quar. div. of 1% on pfd. and 1% on com. stks. Net earnings. for quar. end. March 31, \$23,519,203, comp. with \$25,990,978 for quar. end. Dec. 31, and \$37,365,187 for quar. end. Sept. 30th.—*Steel manuf. are confident that earnings. in second quar. will be at least \$27,000,000 incr. approx. \$3,500,000 comp. with first quar. The Co. in Jan. was shipping at rate of betw. 20,000 and 25,000 tons a day, whereas shipmts. for six weeks past have avged. 30,000 tons a day. Earnings. of \$27,000,000 in cur. quar. would enable Co. to pay regular pfd. and com. divs. and still have surp. of several millions. Steel stk. held abroad totals 255,912 shs. pfd. and 1,003,798 shs. Co. has closed deal for Risdon Iron Works, half a mile of waterfront in San Fran. and 14 blocks adjoining for \$2,500,000.—*Co. is oper. about 61% of blast furnace capacity, reduction 11% from high level latter part of March. A yr. ago it was oper. betw. 80% and 85%. Certain independ. are running not much over 50% of mill capacity. No change in mill oper. for the better is expected this mo.

Virginia Caro Chem.—†Gross sales of this, and other chemical Co's. tend distinctly to rise and fall with prices of farm prod. being due to incr. or diminished purch. power of farmer. The tendency may be seen from the following:

Year.	Gr. Prof. Va. Chem.	Net Prof. Gen. Chem.	Av. Prices Agri. Prod.
1900.....	.....	\$1,258,946	109.5
1901.....	\$2,139,509	1,358,347	116.9
1902.....	4,143,471	1,507,551	130.5
1903.....	3,321,377	1,187,077	118.8
1904.....	4,076,487	1,314,748	126.2
1905.....	3,368,036	1,662,410	124.2
1906.....	4,418,543	1,365,789	123.6
1907.....	5,051,126	1,400,895	137.1
1908.....	4,534,362	1,227,837	127.4
1909.....	5,532,681	2,199,692	132.7
1910.....	6,613,921	2,401,339	133.0

This avge. is made up by U. S. Dept. of Agri., and based upon prices recd. by the farmer. It is striking that with a single exception of 1906 gross prof. of Va. Chem.

rose and fell with these price movemts.; and in 1906 the quantity of farm prod. was so abnormally great as to incr. the purch. power of the farmer, in spite of slight avge. decl. in prices.—*Va. Caro. practice of incl. in net earnings the entire net of its subsid. Sou. Cotton Oil and not merely div. paid by latter Co. is misleading. Net earnings. of \$5,336,668 reported by V. C. for yr. end. May 31, 1910, incl. only \$900,000 in div. paid by Sou. Cotton Oil which is the method ordinarily followed by holding Co., and that bal. of \$2,016,620, or 7.2%, after chgs. and pfd. divs. was the amt. actually earned by V. A. proper, on its junior issue. It appears that Va. Caro. proper earned only \$1,466,615, or 5.2%, on its com. stk. Crediting V. C. with \$900,000, or amt. actually recd. from Cotton Oil Co. would make consol. earnings. on V. C. com. last yr. \$2,366,615, or 8.4% instead of 10.42%. The foregoing is of special import. as earnings. of S. Cotton Oil are running small at present.

Vulcan Detinning.—§Co. rpts. for yr. end. March 31, last net prof. avail. for divs. \$110,056, equal to 7.33% on pfd. stk. In 1910 yr. div. bal. amtd. to \$208,685.—*In pro. against Am. Can Co. for accting. of profits made by them in detinning by our process, the taking of testimony is completed, argumts. by opposing counsel made, and briefs are now being submitted.

Wabash.—§March gross earnings. \$2,372,442, decr. \$151,999; net \$473,686, decr. \$310,015.

Western Maryland.—§Feb. gross earnings. \$476,437, decr. \$58,503; net \$155,065 decr. \$72,401.—†One of the most import. developments is the 99 yr. contract made with Pitt. & Lake E. by which W. M. will be made the seaboard term. of N. Y. Cen. lines throughout the west. In first three quar. of cur. fis. yr. net earnings. showed small decr. but as Co. is primarily a coal carrying road and coal traf. has been from 25% to 30% below normal, the showing should not be consid. disap. Co. has placed order with Standard Steel Car Co. for 500 all steel hopper cars, Oct. deliv.

Western Union.—Co. has prac. finished the most important cable move ever attempted. It has sec. control of the Anglo-Am. Tel. Co., a \$35,000,000 English cable Co., with 10,154 miles of cables and five cable lines betw. the U. S. and Eng. In con. with its own 2 cables, W. U. will now have 7 trans-atlantic cables and likely, the Direct U. S. Tel. Co. enters into similar relation with W. U. the combin. will repre. 8 English cables against five owned and oper. by the Mackay Cos. Inevitably this combin. of 8 cables into one oper. unit means not only larger gross business for the 3 Co., but a larger net for W. U., which will pay a guar. rental and have bal. of net profits for itself.

Mining Stocks

This section of the Investment Digest includes some of the more important properties, in regard to which authentic and trustworthy information has appeared during the month.

Braden Copper.—Stkhlds. auth. an issue of \$2,000,000 conv. 3 yr. 7% bonds and an incr. in cap. stk. from \$12,000,000 to \$14,000,000 for conversion of bonds.—Stkhlders of record May 13, 1911, will be entitled to subs. for bonds at par to extent of one-third of holdings, that is, the owner of each 300 shs. of stk. will be entitled to one \$500 bond. These bonds will be payable 50% on June 15, 1911, and 50% on Oct. 16, 1911.—Engineer of the Co. est. that upon comple. of concent. Co. should prod. 36,000,000 lbs. of copper an. at cost less than $7\frac{1}{2}$ cents per lb.—Assuming that the stk. is incr'd. by 400,000 sh. and bonds issued, Braden will have outst. 2,600,000 shares when all bonds are conv. On output of 36,000,000 lbs., Co. should show earnings per sh. under various metal conditions: Cost, 7c; copper at 12c. per lb., \$.69; $12\frac{1}{2}$ c. per lb., \$.76; 13c. per lb., \$.83; $13\frac{1}{2}$ c. per lb., \$.90.

British Columbia.—On prod. of 9,500,000 lbs. copper per an., with metal at $12\frac{1}{2}$ c., Co. is earning at rate of approx. 50c. per sh. Co. is on a $2\frac{1}{2}$ quart. div. basis (par val. \$5). A div. was rec. decl. pay. June 1st, 1911.—Net earnings approx. \$31,900 in April as comp. with \$24,700 in March. Cost was 9.15 cents against 9.50 in March.

Butte Coalition.—Co. decl. reg. quar. div. of 25c. per sh., pay. June 1 to stk. of record May 16th.—With divs. Co. is receivg. from Anaconda and Inter. Smelt. & Ref., and the int. on its large cash bal., Co. is incr. its surp. At present rate of Co.'s divs., 25c. per sh. quar., disb. calls for \$1,000,000 an., which leaves consid. surp. above requiremts. With paymt. of quar. div., March 1, 1911, Co. has disb. \$3,950,000.

Chino.—Chino issues interim report covering oper. at prop. from date of last an. report to March 1st. All paymts. on mining lands have been made. Co. has now 2,652 acres mineral lands. Add. lands have been bought in connection with mill site and water works. "All applica. for priv. of use of water rights req. for milling purposes and for diversion of them to our mill site have been approved by proper officials, and our rights are secure to sufficient water to prov. for at least double tonnage of present plant."—Estg. ore on a steam shovel basis, there have been fully and partially devel.—45,238,231 tons, avging. 2.3% copper. Of this quantity, more than 32,000,000 tons, or over 71% will be mined by steam shovel.

Goldfield Con.—Co. reports net profits for quar. end March 31 last (partly est.) at \$2,096,952. On above date Co.'s cash bal. aggre. \$2,780,989. On April 29, 1911, after

disb. of div. No. 11 of 50c. a sh., Co.'s cash bal. was approx. \$1,600,000.—The April prelim. report shows that there were treated 28,253 tons of ore, the largest for any mo. since Co. became a prod. Gross rev. am. to \$946,000, and net prof. \$754,000, which is far in excess of div. req.—For the first 4 mos. of cal. yr. gross prof. were \$3,740,616, and the net \$2,972,245, against div. req. of about \$2,500,000.—Ann. of purch. of Jumbo Exten. int. in the Vinegrone claim is also made by officials, the price paid being \$195,000. The big Co. now owns clear title to the Vinegrone claim.

Granby.—At present time Co. is oper. full force, and output is at rate of about 2,500,000 lbs. copper per mo., at cost of about $10\frac{1}{2}$ c., which incl. extraord. chgs. for new devel. Very encour. reports are being given out by managemt. as to Hidden Treasure prop., upon which an option was taken last Nov. As a result of devel., both underground and by drill, it is est. by the engineers that they have in sight 4,000,000 tons of ore which will average $2\frac{1}{2}$ % copper at the Hidden Treas. prop. 4 million tons of ore is two-thirds of tonnage given Granby prop. itself, and consid. the fact that this Hidden Treas. prop. was optioned for but \$400,000, this is a remarkable devel., and is certainly encour. as to Granby's future. During first quar. of cur. yr., Co. pro. 5,380,159 lbs. copper, 107,311 oz. silver and 13,551 oz. gold. There was produring March 1, 988,341 lbs. copper—the largest for many mos.—40,400 oz. silver and 4,912 oz. gold.

Greene-Cananea.—During April, Co. prod. 1,822 tons of bullion, containing approx. 3,644,000 lbs. This is prac. the same as March, when 3,542,000 lbs. were turned out. Prod. is fairly constant, being maint. around 3,600,000 lbs. per mo. or at the rate of 43,000,000 lbs. per an. At Cananea everything is running smoothly, and all plants are oper. as usual, not the slightest trouble is experienced from revolution.

Inspiration.—The Co. during April brought into sight 1,957,000 tons of ore, which incr. tonnage as of April 1 to 24,800,000 tons of 2% ore. Not until middle of 1913 will Co. be in position to start prod. A 45,000,000 lb. output should then be forthcoming, and 9 cents has been named as the pros. cost. With about \$2,000,000 in treas., there will be no need of further finan. in near future, although before the Co. commences to "pay its own board," additional funds will have to be raised.

La Rose Con Mines.—Heretofore fis. yr. has ended June 1, but the change has been made so that the fis. yr. conforms with cal.

yr. Inc. acc. of the Co. for the 7 mo. end. Dec. 31 last: Divs. on 5,999,930 shs. and 70 directors' sh. of La Rose Mines, Ltd., \$475,000 admin. expen., \$15,832; bal. for divs., \$459,168; divs. paid, \$449,588; surp., \$9,580; prev. sur., \$3,781; total surp., \$13,361. Bal. sheet as of Dec. 31 shows cash in banks \$860. Total shipmts. for yr. amtd. to 2,380,609 dry tons, net val. of which was \$437.26 per ton. Shipmts. of silver am. to 2,118,574 oz., net val. of which was \$1,040,934.

Miami.—We have seen an official statement that with its present equip., Miami will be able to prod. 40,000,000 lbs. copper per an. at a 7c. cost. This is by far the lowest cost ever been claimed for Miami, and if it can be maint. it would indicate prosp. earnings of \$2.80 per sh. on 12c. copper, and every 1c. adv. in price would inc. earngs. 56c. per sh. With all bonds conv., Miami would have outst. 748,235 sh. of stk. With an an. prod. of 40,000,000 lbs. of cop., a 7-cent cost on a 12-cent copper market should prod. \$2,000,000 net equiv. to \$2.60 per sh. The report for the yr. end. Dec. 31, 1910, shows: Bal. Jan. 1, 1910, \$52,566; ore obtained during yr., est. val., \$116,248; total \$168,814; gen. expen., bond int., etc., less rev., \$129,894; profit and loss surp., \$38,920.

Mines Co. of Am.—Co. has not lost a single day's oper. at either Dolores, El Rayo, Creston-Col., or La Dura prop. by reason of conditions in Mexico. Co. is paying quar. divs. of 2½%. Its oper. acct. Jan. 1, 1910, to Dec. 31, 1910, shows total net profit of \$1,012,898, divided as follows: Dolores, \$426,513; El Rayo, \$374,821; Creston-Colorado, \$218,500; La Dura, \$41,329; total, \$1,061,164. Deducting a gen. exp. of \$48,226, net prof. was \$1,012,898. Supplies, bullion and concentrates on hand and en route amt. to \$1,146,802.

McKinley-Darragh.—The directors have decl. quar. div. of 3% and an extra div. of 7%. The last prev. was 3% and an extra of 12. On Jan. 1 Co. had reserves est. at 6,041,500 oz. silver, comp. with 5,725,000 oz. on Jan. 1, 1910, notwithst. that 2,639,544 oz. were extracted during yr.

Nevada Consol.—Co. March prod. 5,632,256 lbs., which is the largest single mo.'s prod. since last Aug. Feb. output was 4,996,533 lbs. In Jan., 4,745,066 lbs. Co. rpts. for quar. end. Mar. 31 net earnings \$1,012,729, incr. \$185,745, bal. after div. and int. \$263,349, incr. \$182,787, surp. \$126,466, inc. \$176,347. Prod. of cop. per 15,893,743 lbs., incr. 2,365,096.

Nipissing Mining.—Co. rpts. for yr. end. Dec. 31 last gross inc. \$3,036,753, incr. \$534,393; net \$2,167,103, incr. \$479,874, divs. \$2,127,500, incr. \$592,500, total surp. \$952,799, incr. \$39,603. Prod. costs red. to 14.72c. per oz. Shipmts. of silver during yr., 5,597,778 gross oz.

North Butte.—The an. report for 1910 shows that during yr. prop. prod. 25,267,092 lbs. copper, 998,190 oz. of silver, and 11,095 oz. of gold. Owing to condition of copper

market during entire yr., mines were oper. at 80% of normal. During yr. net amtd. to \$560,888. There were paid in div. \$446,000 and the surp. on Dec. 31 amtd. to \$1,677,202. One of most signif. features in report is that during yr. the ore reserves were incr'd. from 882,000 tons to 958,680 tons, and the ave. contents raised from 4¼% copper and 2½ oz. silver to 4¼ copper and 3 oz. silver. Since above report was written very important develop. have taken place at North Butte in the sinking of the main Spec. shaft and on the Croesus vein. In the former a vein 15 feet wide has been interscd. of which a five-foot section carries high-grade copper ores avging. 22%. On the latter the vein has incr'd. 16 feet in width, and avgs. from 9 to 11% copper.

Old Dominion.—Co. is in position now where it can earn \$75,000 net per mo. on a 12c. copper market, which is equiv. of \$3 per share, or as much as Copper Range is now earnng., and every one cent adv. in price of copper, even on the present output, would add nearly \$1 per share per an. to earnings, for its stk., and consid. that with any imp. in metal market conditions Old Dom. is in a position to materially incr. its output, the future prospects of property seem bright.

Ray Consol.—Co. new mill, with one section oper., is concn. the ore about 18 tons into one and recov. approx. 30 lbs. of copper to the ton. The second section of concn. is to go into comm. this week. Results to date have been highly satis., and Manager Jackling is quoted as stating he is satisfied that prod. cost of Ray Consol. copper will not exceed 8½ cents lb. Co. has an auth. issue of \$2,000,000 of con. bonds, of which \$100,000 was outst. up to first of yr. Since that the second \$100,000 has been disposed of, which has given the Co. funds for immediate devel. pur.

Tennessee Copper.—Co. rpts. for yr. end. Dec. 31 last gross prof. avail. for divs. \$445,387, inc. \$105,981. Accordg. to an. report, net earnings. avail. for outst. stk. were equal to 8.9% against 6.79 last yr. This may be consid. a fairly satisf. showing. In these earnings are incl. the profits from Co.'s acid plant, which, although comple. only last Dec., turned out in that mo. over 12,000 tons of acid. A large rev. every yr. is expected from this branch of its business.

Tonopah Belmont.—During yr. which term. Feb. 28, net amtd. to \$1,502,381, nearly 15 times that of prev. period. There were sold 36,115 oz. gold and 3,527,075 oz. silver, returning total of \$2,597,279. There were treated 81,066 tons taken from devel. work and from a comp. small amt. of stoping. This tonnage had a total val. of \$2,831,727. Prob. the most sig. feature of report is the marked incr. in val. of ore treated, that sent to smelter running \$54.76 per ton against \$34.89, and that milled \$27.58 comp. with \$14.40 for prev. yr. Co. decl. reg. div. of 25c. a shr., pay. July 1 to stk. of record June 15.

Tonopah Mining.—During fis. yr. end. Feb. 28, 1911, the Co. made net \$2,011,422. There were paid in divs. \$1,550,000, leaving net surp. for yr. \$461,422, and total surp. of \$5,376,841. The net and total surp. both exceed the fig. of prev. yr. of \$1,639,602 and \$4,967,919 respect. Although savings were effected, which resulted in decrg. costs, and earnings for yr. were satis., the report is disappointing as to ore reserves, as not only tonnage has decrd., but also avge. val. of the ore.

Tuolumne.—Co.'s capital stk. 800,000 shs. has been admitted to unlisted dept. of Boston stk. exch. The Co. has something over \$340,000 cash and quick assets, and is paying divs. at the rate of 15 cents per sh. quar., or \$480,000 an. Its mo. prod. recently has approx. 1,000,000 lbs. of copper.

Utah Consol.—Co. is now sending to the Int. Smelt. & Ref. Co.'s plant at Tooele, about 400 tons of ore a day, of grade betw. 3½ and 4% copper per ton. This is consid. higher than avge. grade treated for several yrs. Allowing for losses in smelting, this ore should show recov. of from 65 to 75 lbs. per ton. Should the avge. be maint. at this grade, it would indic. a prod. around 840,000 lbs. per mo. Since striking the new ore body which it was claimed was running 4½% copper, the managemt. states that recent devel. have been showing the grade to be as high as 6%. In view of favor. devel., the managem't. believes that tonnage will be steadily incrd. until the min. of 800 tons per day is attained.

Utah Copper.—During the yr. Co. made net prof. of \$5,401,775, which incl. \$1,459,775 recd. in divs. on the Nevada Con. stk. held by Utah. Divs. amtd. to \$4,648,863, leaving surp. of \$752,912, which brought undivided prof. up to \$3,696,539. The surp. acct. as of Dec. 31, 1910, amtd. to \$6,083,980. There was prod. 85,644,511 lbs. copper at cost of 8.069c. per lb. comp. with 51,749,233 lbs., and a cost of 8.787c. for prev. yr. The price rec.

for copper was 12.67c. per lb., against 12.91c. for 1909, and earnings of \$5,401,775, comp. with \$2,160,030 for prev. yr. During 1910, the Boston Consol. prop. was taken over by Utah, as was also control of the Nevada Consol. Co. rpts. for quar. ending March 31 total net profit \$1,174,508, incr. \$302,550. Copper prod. during quar. amtd. to 21,296,709 lbs. at avge. cost of 8.434c. per lb. During prev. quar. 22,188,719 lbs. of copper were prod. at avge. cost of 8.277c.

Copper Notes.—Of 57 prod. copper mines in U. S., Mex. and Can., but 13 can earn any divs. on 12c. copper, and but 4 prop. can earn their present rate, namely, Cal. & Hecla, \$24; Utah Copper, \$3; Nevada Con., \$1.50, and Old Dom., \$1. Under these circum. it is hardly to be expected that a 12c. copper market can be of very long duration. On 12c. copper, production of the country is worth about \$200,000,000, and of this val. \$175,000,000 rep. cost of prod., leaving but \$25,000,000 for profit to the prod. Of the 57 prod. mines, 26 of them contrib. ¾ of the total copper prod., or about 950,000,000 lbs.—15 other prop. prod. prac. 95% of the bal., or 330,000,000 lbs. Three-quar. of this country's prod. is controlled by five different groups as follows:

	Pounds.
Amalgamated	275,000,000
Guggenheim	200,000,000
Phelps-Dodge	175,000,000
Cole-Ryan	160,000,000
Calumet & Hecla.....	140,000,000
	<hr/> 950,000,000

Exports for week end. May 11 were 5,427 tons, since May 1, 10,010 tons, against 12,121 last year. Producers' Ass'n. rep. stks. on May 1 as 165,555,904 lbs., an incr. of 3,547,974 lbs. Prod. 118,085,223 lbs., decr. 12,446,857 lbs. Foreign deliv. 62,129,599 lbs., incr. 3,048,472 lbs. Domestic deliv. 52,407,650 lbs., decr. 13,673,139 lbs.



INQUIRIES

WE DO NOT GIVE ADVICE OR OPINIONS UPON SECURITIES OR PROBABLE MARKET MOVEMENTS, EXCEPT AS MAY BE IMPLIED IN THE "MARKET OUTLOOK" OR THE "BARGAIN INDICATOR."

This department is to answer miscellaneous questions in regard to the science of investment, methods of operating, the customs of the markets, etc. Please write questions briefly and, if personal reply is desired enclose stamped and self-addressed envelope. Address **INQUIRY DEPARTMENT.**

Cobalt.

Where can I procure Davis' Handbook on Cobalt?—J.

We have it in stock. Price, 90 cents, postpaid. It is considered the best authority on the subject.

Low of Stocks in 1896.

What was the low point of the Dow-Jones averages in 1896?—W. H.

The low point of the averages for twenty rails was August 8, 1896, 41.8. From this figure the advance was fairly continuous until 1902.

Weekly Outside Clearings.

P.—The diagram of outside clearings in the May Ticker is based on clearings for the month, which are compiled by Dun's Review Monthly. For April the outside clearings were \$5,324,904,000. Undoubtedly you could work out the same principle from the weekly clearings but we doubt if it would pay you to do this as the figures will not give you the turn in the stock market any closer than thirty days. Therefore the monthly clearings are just about as good as the weekly clearings and considerably easier to record.

Records of Past Fluctuations.

What is the best way to get records of fluctuations of stocks for past years?—S. T.

See advertisement in this issue of our booklet, "25 Years in the Stock Market." If you want the fluctuations of each stock separately, order the back numbers of the "Annual Drift of the Market," which can be obtained from 1902 to 1910 inclusive. Each book is of 64 pages, 7x10 inches with cover, and is complete in itself. The course of each stock for a whole year is shown at a glance. Point movements in eighty railroads and industrial stocks are illustrated in the 1910 annual. The descriptive matter regarding railroads and industrials gives a clear idea of relative values. The statistics include the high, low, and dividends, arranged by years back to 1901. Price, \$2 each, postpaid.

Execution of Order in Steel.

Last Tuesday, April 25, I sold short 100 shares of steel at 74 and gave an order to cover at 73. Afterwards two sales were made at 73, 100 shares each time, and yet my broker said he could not cover at 73. Am I justified in demanding an explanation?—J. R.

You can scarcely find fault with the execution you mention on 100 Steel at 73. If only 200 shares were sold there your broker stood small chance of getting 100 for you. The stock was probably in demand at that figure and doubtless many others were unable to purchase.

Crop Moving—Dividends.

(1) Are stocks generally affected before the crop movements, and, if so, kindly mention the important months of the year.

(2) Is the quarterly dividend on a stock always declared on the same day of the month?—A. J.

(1) A good crop prospect has a considerable tendency to help the stock market, as it causes greater firmness in prices generally, especially in the stocks of the Western roads. The principal effect of the crop movement on the stock market comes after the crops are sold and the money received for them by the farmers finds its way into bank deposits. This causes a definite increase in the wealth of the country, and this new capital gradually seeks investment in stocks, bonds, etc. The direct effect is to increase bank deposits and enlarge bank reserves. This produces easier money, and consequently better prices for securities. The larger the crop and the better the price obtained for it, the greater this effect.

During the fall, especially in September, October and November, the movement of money to the country to pay the farmers for their produce sometimes drains the banks' surplus to a low point and causes tight money, resulting in temporarily lower prices for stocks.

(2) Quarterly dividends on the leading stocks are ordinarily declared on or about the same day of the month, but there is no rule about this. Some companies make a rule of holding dividend meetings, say the first Wednesday in the month, etc.

Index Numbers.

Will you kindly send me Gibson's Index Number for Cost of Living for 1902, 1903, 1904, 1905 and 1906. Also for the months of April, May, June, July and August, for 1907, 1908 and 1909?

Gibson's Index Numbers begin with the year 1907. However, the method by which they are compiled is very much the same as that used for Dun's Index Number, which was compiled for previous years but was discontinued in 1907. Dun's Index Numbers for the years specified were as follows:

1902.....	101.9
1903.....	99.5
1904.....	97.2
1905.....	98.3
1906.....	105.2

Gibson's Index Numbers:

1907.....	109.9
1908.....	105.5
1909.....	111.9
1910.....	115.2

Each of the above numbers is an average for the entire year. The monthly numbers you request were as follows:

	1907.	1908.	1909.
April	110.6	105.4	110.7
May	113.4	105.3	114.1
June	113.4	106.2	114.4
July	111.8	107.3	112.8
August	110.2	106.7	111.4

Earnings on Price—Oversold.

Kindly explain what you mean in your Bargain Indicator by "Earnings on price last fisc. yr."? When the market has been oversold what effect has it on the market?
—J. R.

Every company has a fiscal year at the end of which its accounts are balanced and the results usually made public. The fiscal year of most railroads ends June 30. Many industrials end December 31, but there is a good deal of variation among the industrials. The heading "earnings on price last fiscal year" in the Bargain Indicator gives you the per cent. earned by the company during the last fiscal year for which the reports have been made public, on the current price of the stock as given in the table. For example, in the May Bargain Indicator, Chesapeake & Ohio is shown to have earned 10 per cent. during the fiscal year ending June 30, 1910. As the price, at the time this table was compiled, was 80, the earnings on price, on the basis of the report for the fiscal year, were 12.5 per cent.

When the market is oversold there is an unusually large short interest outstanding, which is likely to be frightened by any bullish development or even by the failure of the market to decline further. Therefore, an oversold market is likely to have a sharp advance before long. Just the opposite condition prevails in an overbought market. Such a market contains a widely

distributed long interest, much of it on margin, so that any bearish development is likely to produce a sharp break.

Commission Rates.

Please advise me current commissions on all classes of stocks.—R. M.

The following are the commissions charged by a well-known stock exchange house, which also does a large business on the curb:

NEW YORK STOCK EX-

CHANGE\$12.50 per 100

Exception; Mining Stocks

selling below \$10..... 6.25 per 100

Note:—Reading, Pennsylvania, Lehigh Valley, Westinghouse, and other Railroad and Industrial Stocks of \$50 par, are known as "half shares" and it takes 200 shares of these stocks to make 100 full shares.

NEW YORK CURB—

Stocks selling at \$10 or

more\$12.50 per 100

Stocks selling below \$10 and

at \$4 or more..... 6.25 per 100

Stocks selling below \$4 and

at \$1.50 or more..... 3.13 per 100

Stocks selling below \$1.50. 1.00 per 100

BOSTON STOCK EXCHANGE—

Stocks selling at \$5 or more.\$12.50 per 100

Stocks selling below \$5 and

at \$1 or more..... 6.25 per 100

Stocks selling below \$1..... 1.00 per 100

or any part thereof

Exception; Mining Stocks

selling below \$10 and at

\$1 or more..... \$6.25 per 100

BOSTON CURB—

Stocks selling at \$10 or

more\$12.50 per 100

Stocks selling below \$10 and

at \$5 or more..... 6.25 per 100

Stocks selling below \$5 and

at \$1 or more..... 3.13 per 100

Stocks selling below \$1.... 1.00 per 100

Commission on N. Y. Curb Stocks listed on Boston Stock Exchange is at the Boston Stock Exchange rate.

Getting a Job with a Broker.

I would like information regarding the securing of a position in a broker's office. As I never had any experience with this line of work, and take considerable interest in finance, I would like to know what course to pursue in order that I may be qualified to secure a position; also what salary is paid to the employees in a broker's office. I have received a civil engineering education and at present am employed with a railroad company.—R. T.

Brokerage houses generally have use for four classes of employees. First, customers' men, who are able, in one way or another, to get commission business for the

house. Such an employee needs to be acquainted with capitalists who have money to invest or with large traders who will place their business with the house which he represents, or else to be an unusually good judge of the market so that he can build up commission business by his personal advices. Second, bookkeepers, who must have a thorough knowledge of stock exchange methods and of the particular kind of accounting which is practiced by commission houses. Third, stenographers, who must be rapid and accurate and must have a knowledge of the terms used in stock exchange work and a general idea of the methods employed. Fourth, minor clerks and office boys, who usually receive small salaries.

Your civil engineering education would be probably of but little value to you in the brokerage business. Railroad experience might be of some value. In the brokerage business, as in every other, the best progress is naturally made by those who start in young as office boys or clerks and gradually learn every detail of the work.

Many clerks, stenographers, etc., desire to get into brokerage houses because they think the hours are short and the work easy. Probably the hours average shorter than in the railroad business, for example, but in seasons of activity on the exchange there is likely to be a good deal of night work and a severe pressure on clerical employees of all kinds. Salaries are not especially liberal in view of the skill and ability which is ordinarily required. Opportunities of promotion are not especially good, unless the employee reaches the point where he can control business which will produce commissions. Demand for clerks fluctuates widely. At present there is none.

The Ticker Library

We have a large number of financial books always in stock and so arranged that visitors can easily look them over and make such selections as they wish. We shall be pleased to have our readers call at any time.

The Figure Chart

The following figure chart completes the chart on page 108 of the July TICKER down to date given. It is based on the daily average closing price of 20 standard railway stocks, and gives a general view of the course of the market since June, 1910.

June 22	Aug. 17	Oct. 18	Feb. 20	May. 18
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118 118		118	118 118	118 118
117 117		117 117	117 117	117 117
116 116		116 116	116 116	
115 115	115	115 115	115	
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112 112 112	112 112 112	112 112		
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	108 108			
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	106			
	July 27			

Readers frequently ask to be referred to responsible brokerage houses. In making such a request, please state what amount you have for investment, or in what sized lots you wish to deal. Also state what large city is located most conveniently to you, or if you have any preference in this regard.

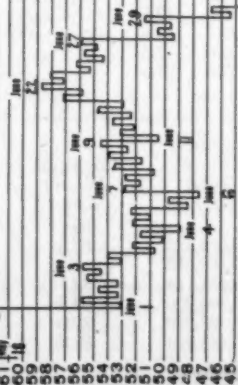
We refer our readers only to such houses as we would consider safe custodians of our own funds, but of course can take no further responsibility.

READING.

Every point measured above 10 of base

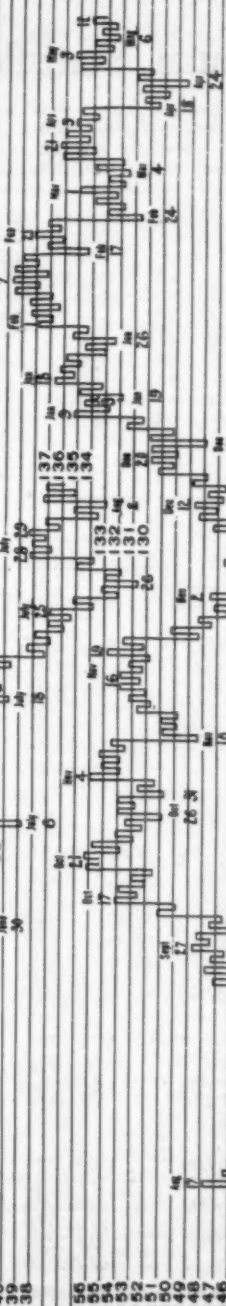
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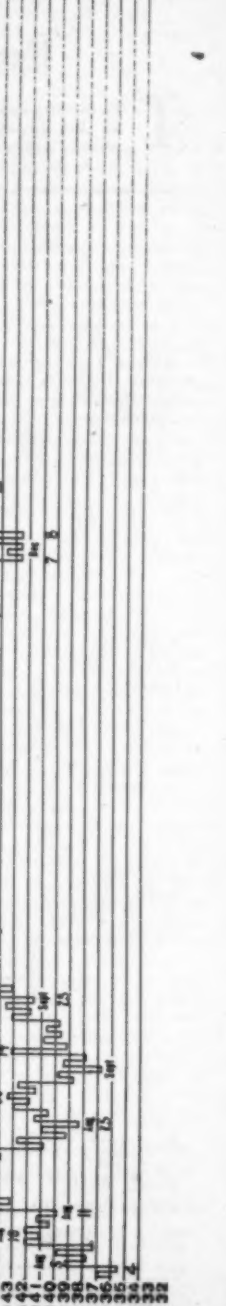


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Essential Statistics Boiled Down

THE figures below give a complete view of the financial and industrial situation. Under each head we give figures for the *latest* month available,

for the preceding month (in some cases the preceding *two* months), and for the month corresponding to *latest figures* in each column, for each of the four preceding years.

	Average Money Rate Prime Commercial New York.	Average Money Rate European Banks	Per Cent. Cash to Deposits, New York Clearing- house Banks.	Per Cent. Loans to Deposits, New York Clearing- house Banks.	Per Cent. Cash to Deposits, All National Banks.	Per Cent. Loans to Deposits, All National Banks.	Money in Circulation Per Capita First of Month.
May, 1911.....	3½	3½	28.2	96.1	.....	.....	\$34.55
April, 1911.....	3½	3½	27.3	96.8	.....	.....	34.53
March, 1911.....	4	3½	27.4	97.1	17.1	105.3	34.51
Corres'g mo., '10.....	4¾	3½	26.8	101.5	16.0	104.5	34.45
" " '09.....	3¾	3	26.0	95.6	18.2	103.3	34.92
" " '08.....	5¼	3½	29.6	94.1	20.0	105.5	35.37
" " '07.....	5½	4½	26.0	101.7	15.4	107.1	34.16

	New Securities Listed N. Y. Stock Exchange (000 omitted)	Bank Clearings of U. S. (000 omitted)	Bank Clearings of U. S. Excluding N. Y. City. (000 omitted)	Balance of Gold Movements —Imports or Exports. (000 omitted)	Balance of Trade Imps. or Exports. (000 omitted)
April, 1911.....	\$133,448	\$12,380,845	\$5,411,032	Im. \$3,019	Ex. \$37,876
March, 1911.....	140,120	13,449,027	5,827,426	Im. 3,613	Ex. 22,879
Corres'g mo., '10...	114,749	14,001,387	5,659,725	Ex. 34,182	Im. 853
" " '09.....	124,666	13,689,794	5,075,065	Ex. 2,988	Ex. 2,989
" " '08.....	152,606	9,764,600	4,277,026	Ex. 11,915	Ex. 45,932
" " '07.....	217,753	12,661,631	4,994,103	Im. 2,754	Ex. 27,897

	Bradst's Index of Commod- ity Pcs.	Gibson's Index of Cost of Living.	Whole- sale Price of Pig Iron.	Produc'n of Pig Iron (in Tons).	Price of Copper (Cents).	U. S. Produc- tion of Copper (Lbs.)	U. S. Steel Co.'s Unfilled Tonnage.
May, 1911.....	\$8.45	106.8	\$15.45	.....	12.0	.....	.....
April, 1911.....	8.52	106.2	15.73	2,065,000	12.0	118,085,000	3,218,704
March, 1911.....	8.69	107.5	15.87	2,188,000	12.1	130,532,000	3,447,301*
Corres'g mo., '10...	9.03	117.7	17.49	2,390,000	12.5	117,477,000	5,402,514*
" " '09.....	8.30	114.1	16.12	1,880,000	12.8	113,574,000	3,542,595*
" " '08.....	7.96	105.3	17.12	1,165,000	12.6	.....	3,765,343*
" " '07.....	8.93	113.4	26.60	2,295,000	24.0	.....	8,043,858*

*Mar. 31.

	Net Surplus of Idle Cars.	Building Operations, Twenty Cities.	Business Failures Total Liabilities.	Condition Winter Wheat.	Net Earnings 10 Leading Railroads.
May, 1911.....	.....	.....	.....	86.1*	.....
April, 1911.....	187,000	\$54,313,271	\$15,076,583	83.3	\$17,729,490
March, 1911.....	207,000	51,022,522	17,198,658	.....	15,464,437†
Corres'g mo., '10...	96,000	62,839,455	21,051,113	82.1	15,862,596
" " '09.....	281,000	71,435,000	17,394,206	83.5	15,428,928
" " '08.....	413,000	42,115,000	21,368,239	89.0	13,048,865
" " '07.....	.....	67,293,000	10,485,074	82.9	16,598,007

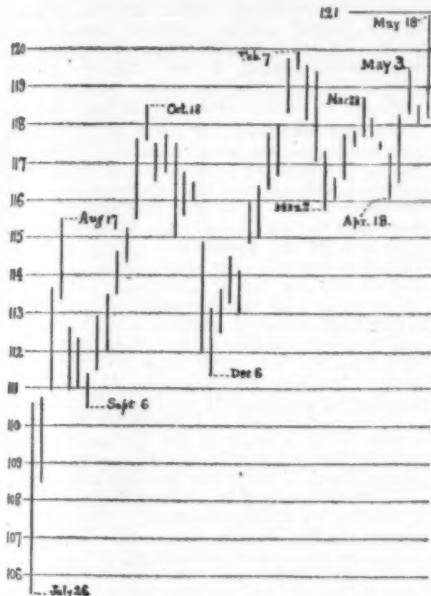
*Estimated yield 489,325,000 bu. against 464,044,000 in 1910.

†Incomplete.

The Market Outlook

By G. C. SELDEN

WEEKLY high and low for the average closing price of 20 standard railways since the low point of last July are shown in chart form herewith. The figure chart will be found on page 92.



The last week shown on this chart last month was the week ending April 15, which had the narrowest range of prices found since last July and the narrowest I remember for years past. The opinion was expressed that the market would prove "resilient" and that an advance to new high prices was probable. This proved correct, as seen from this month's chart.

An accumulation of bear news—Mexican situation, proposed investigation of U. S. Steel, uncertainty as to Supreme Court decisions, etc.—forced the average of the 20 statistical rails down to 116.05 on April 18; but the only permanent result of the decline was to encourage a short interest which was unable to cover without putting the market up to 119.45 on May 3. New lines of short stocks were then put out with the expectation that at least one of the decisions would be handed down May 15. These stocks were "sold into a bag," as the saying goes. The market reacted only to 118.06 on May 10, and on Monday, May 15, before the decision was given out, prices had already begun to advance.

The next morning, after the decision, prices opened higher on large transactions and advanced to a new high point for the year.

Did the market know the decision in advance?—The fact that prices had already had a considerable advance, between April 18 and May 15, before the decision was made public, has been commented on as showing that the market can discount any coming event, even though no one, apparently, has any way of knowing what that event is to be. But probably the true explanation is that prices were responding to bullish conditions as regards money rates and the supply of capital, and that the uncertainty about the decision merely served to hold the bull movement partially in check. As soon as this incubus was removed, the market bounded up. It would, I think, have been hard for the Supreme Court to have handed down any kind of a decision within the bounds of sanity, on which the market would not have put a bullish construction, with banking and money conditions as favorable as at present.

The Standard Oil decision, however, can only be regarded as favorable to capital. It will take years of litigation, even if the Government continues its present activity against the trusts, to find out what constitutes an "unreasonable" restraint of trade. The coming American Tobacco decision is likely to shed some light on the subject, but cannot by any means settle it. In the meantime corporate affairs will go on much as heretofore, with perhaps occasional readjustments, such as Standard Oil is now forced to make.

Effect of the decision.—The effect of the decision on general business will be similar to its effect on the stock market, only of course slower. A large number of business men, especially those in charge of big corporations, have been sincerely in doubt as to the conditions under which they were to be permitted to continue their business. They have felt the same hesitation about buying goods or beginning improvements or extensions, that the investor has felt about buying stocks. Relief from this uncertainty will result in a better tone in general business until some new obstacle arises. Such an obstacle is most likely to take the form of adverse legislation or renewed scarcity of capital, and neither of these seems likely to overtake us for at least some months to come.

Prospect for the supply of capital.—The immediate supply is abundant. Call money is averaging $2\frac{1}{4}$ to $2\frac{1}{2}$, and commercial paper has been $3\frac{1}{2}$ to $3\frac{3}{4}$, but has stiffened about $\frac{1}{4}$ within a few days, owing to greater activity in stocks and perhaps to some increase in the demand for commercial purposes. Reserves are over 28 per cent. of deposits of the New York clearinghouse

banks, and deposits exceed loans by \$55,000,000. Such figures indicate plainly a surplus of capital for investment; the only question is, into what form of enterprise will this capital go, and how long will the supply last?

Previous to the Supreme Court decision the movement of capital was chiefly into bonds, as that form of security was considered safe no matter what the court might do. Since the decision, capital has begun to go into stocks, especially some of the high-grade dividend-payers. During the summer, at least, commercial demands on the money market are not likely to be heavy, but they may be expected to increase in the fall, especially if adverse legislation is successfully checked. The demand for money to move the crops will begin in July, and will of course cut into bank reserves. We can tell better later in the season, but it does seem as though, with over \$45,000,000 excess reserves at New York and over \$50,000,000 excess deposits, and similar conditions at most of the other reserve centers, we ought to get through the crop-moving period without any serious tightening of the money market.

On the other hand, we cannot, it seems to me, expect any very prolonged bull movement. It takes capital to buy stocks, and capital is "saved wealth." The people of this country have not saved any great amount of money during the past year. It will be remembered that the excess of loans over deposits at New York did not finally disappear until last January. For a year business has been quiet, and recently the prices of all the principal farm products except cotton have been falling. The decline in the business of mail order houses at Chicago shows that the farmer is economizing, but he hasn't had time to save much money, especially at the present prices of grain. Most business men and merchants are operating on a relatively small margin of profit.

Even though all the above is true, however, speculation might carry prices to unexpected heights during the time while plenty of capital is available. We have had a long period of speculative dullness and everybody is anxious to be doing something. Much depends on the attitude of the great banking interests. If they should decide that the present is an opportune time to build up the structure of prices and achieve a much higher level for the customary periodical distribution of part of their immense holdings, then the response of the market to bullish conditions, will be much more prompt and emphatic than

would be the case if the banks were instructed to use repressive measures. Of course, no such measures are now visible or necessary—I am discussing the length to which the bull speculation may possibly run.

Significance of bond sales.—Those corporations that are getting new supplies of capital through the sale of bonds, are not going to let that money remain idle very long; they will soon be using it for improvements and extensions, thus putting it into active circulation in the arteries of trade and giving a stronger tone to general business. This, of course, is exactly the reason why an advance in investment markets always precedes improvement in general trade, or "discounts" business conditions, in the language of the market—a point which many persons have difficulty in understanding or even admitting.

Foreign trade.—If we are to have proper conditions we must succeed in avoiding any large export of gold, as this depletes bank reserves and cuts the basis from under credit in short order. It is therefore important to note that the balance of trade is still running strongly in our favor, the excess of merchandise exports over imports being nearly \$38,000,000 for April. Declining prices for commodities in this country, with a relatively high range of prices abroad, have naturally produced this result. Bradstreet's index number for April was 8.45, and has shown an almost continuous decline since the high point of 9.23 in January, 1910.

Even more important is the condition of our crops. This is good so far, but the real test will be the hot weather of July and August. Since March 1, there has been a deficiency of moisture amounting to at least 25 per cent. in the Missouri Valley, the Rocky Mountain region and the Pacific Northwest. However, our crops are now so diversified and the region over which they are grown is so wide that deficiencies in one locality are likely to be made up by good returns elsewhere. Average crops are always to be counted upon in the absence of strong evidence to the contrary.

Summary.—I think the present prospect is for higher prices for standard stocks, with of course the usual reactions. Bonds are likely to advance somewhat further, but it is important to remember that bond prices always culminate earlier than the stock market. For the investor who carries his stocks several years, these are not bargain days, certainly; but my judgment would be that he should stick to his present holdings tenaciously for the present.

May 20, 1911.

